COURSE INFORMATION
MATH 2275 (Linear Algebra II) – Winter 2012

Math 2275 (Linear Algebra II) picks up from where Math 2255 (Linear Algebra I) left off. We will look at eigenvalues and eigenvectos, orthogonality and least squares, symmetric matrics and quadratic forms, and the geometry of vector spaces.

Time	Class: TTh 8:30-10:00
Place	Class: Ryan Building 2047
Instructor	Adam Van Tuyl
	Office: RB 2015
	Office Hours: TTh 10:15-11:30
Text	*Linear Algebra and its applications (4th Edition)* by David C. Lay
Email	avantuyl@lakeheadu.ca
Web Page	http://flash.lakeheadu.ca/∼avantuyl/courses/2012_math2275.html

Contact Information. The best way to contact me is via email. The class webpage is also a good source of information. I update the webpage after every class.

Outline. Math 2275 is a one semester long course. We will cover Chapters 5 through 7 and some of Chapter 8 of Lay's book.

Marking Scheme. The evaluation is composed of three components.

1. Homework (10%) A homework assignment will be given out every Thursday. It will be due the following Thursday at the *beginning* of class. There will be 9 homework assignments per semester. For each semester, the homework assignment with the lowest grade will not be counted. The solutions will be posted on ERES, the electronic reserve of Lakehead Library, once the assignments have been handed in (a link is on the webpage).

All of the homework questions will be taken from the text book. Exercises will be marked out of 2 or 4 points, depending upon the level of difficulty.

Questions out of 2 points will be graded as follows:

> [2 pts] Near perfect or perfect solution. A near perfect solution is a solution that is correct up to the final stage with possible mistake or sign error at the last step.
> [1 pt] The solution shows some of the needed ideas, but fails to have the final solution.
> [0 pts] Little or no progress is made toward the solution.

Questions out of 4 points will be graded as follows:

> [4 pts] Near perfect or perfect solution. A near perfect solution is a solution that is correct up to the final stage with possible mistake or sign error at the last step.
> [3 pts] Most of the needed ideas are present, but misses a key point, or is poorly written.
> [2 pt] The solution shows some of the needed ideas, but fails to have the final solution.
> [1 pt] One or two initial steps are made.
> [0 pts] Little or no progress is made toward the solution.

Further notes on homework:

- Every assignment must contain the course number, the assignment number, your name, and your student ID, and the instructor's name. (Every week, hundreds of math assignments are turned in - make sure your assignment gets to the right person!)
- Homework must **always** be stapled together (no paper-clips, folding the pages, folders, etc. will be accepted). Failure to do this will result in **10 points deducted** from the assignment. (Paper-clipped assignments have the tendency to fall apart; assignments in folders make more work for the grader.)
- Late homework will have **10 points deducted** for every day (the weekend is counted as one day) that is late. Once the solutions have been posted, you may no longer submit an assignment.
- The copying of assignments will result in a mark of 0 for both assignments.
- Homework may be handed in early by either giving it to me or by placing it under my office door. Do **not** bring your assignment to the math office.

2. Tests (2 Midterms, 25% each x 2 = 50%) There will be two midterms. The midterms are not cumulative. The dates of the midterms are (provisionally):

Febuary 9, 2012 - Midterm 1
March 15, 2012 - Midterm 2

3. Exams (Final Exam 40%) There will be a cumulative final exam in April. The exact date will be given later once the exam schedule is posted.

A friendly piece of advice: do not book your plane ticket home until you are certain about the exam schedule. A flight is not an acceptable excuse for missing an exam.

4. Challenge Assignments (Bonus 2%) Twice during the year, I will post special Challenge Assignments. These assignments will allow you to look at some of the ideas we have studied in class in more depth. You are under no obligation to do these problems; each assignment will be worth up to 1% bonus mark. Further information will be given out with the first such assignment.

Class Policies. Though attendance is not mandatory, I would appreciate the fact that you show up on time if you do decide to come to class. Arriving late disturbs both me and your fellow classmates. Also, please **turn off** your phone while in class, and **no texting**.

Changing Marks. If you disagree and/or have a problem with a particular mark on an assignment or exam, please use the following procedure. First, check you assignment/exam against the solutions. If this does not clear up any problems, on the front of the assignment/exam, please write the question number you want re-graded, and why it should be re-graded. Then hand it back it in. I will then take a look at the assignment/exam and see if the mark needs to be adjusted. If there is simply an addition error with the marks, please hand it back in to me with the correct number at the top.

Exams and tests must be taken on the date assigned, except if there are medical or family emergencies. In these cases, notes will be required.

Important Dates.

Jan 6, 2012 - Second semester begins
Feb 9, 2012 - Midterm 1
Feb 20-24, 2012 - Reading Break
March 7, 2012 - Last day to drop without academic penalty
March 15, 2012 - Midterm 2
April 5, 2012 - Second semester ends
April 10-20, 2012 - Final Exams