

# MATHEMATICS 2P12 (Fall 2011)

## LINEAR ALGEBRA II

Professor: Dr. Yuanlin Li  
Room MC J422  
Email: yli@brocku.ca  
Home Page: <http://spartan.ac.brocku.ca/~yli/2P12/2p12f11.html>

Lectures: TR: 9:30 - 11:00 am (TH 244)

Tutorials: Tuesday: 4:00-5:00pm (WH 204) and Thursday: 4:00-5:00pm (WH 203)  
(starting from the third week)

Office Hours: TR: 1:00 - 2:00 pm or by appointment

Textbook: *Elementary Linear Algebra Applications Version*, 10th edition, by Anton, H. and Rorres, C. John Wiley and Sons, Inc., Toronto, 2010

Prerequisite: MATH 1P12

Marking Scheme:

Four Assignments: 30%  
Midterm exam: 25%  
Final exam: 45%

Course Content: This course covers the following topics:

Finite dimensional real vector spaces and inner product spaces; matrix and linear transformations; eigenvalues and eigenvectors; the characteristic equation and roots of polynomials; diagonalization; complex vector spaces and inner product spaces\*; selected applications.  
(§ 4.1 - 4.10. § 5.1 - 5.3. § 6.1 - 6.3, 6.4\*. § 7.1\*, 7.2 \*.§ 8.1 - 8.5.) .

Exams and Assignments:

Exam	Date	Mark
Midterm	Tuesday, Nov. 1	25%
Final	TBA	45%

  

ASGN #	Due Date	Mark
1	Friday, Sep. 30	7.5%
2	Friday, Oct. 21	7.5%
3	Friday, Nov. 11	7.5%
4	Friday, Dec. 2	7.5%

Notes:

(1) The Midterm exam will be 60 minutes long and held during the regular lecture time in your classroom. The final exam will be of 3 hours duration. **No make up midterm will be arranged.** If a student misses the midterm exam for a very good reason (proof required), the weight will be added to the final exam. To provide a medical certificate, a student should go to “[http://www.brocku.ca/webfm\\_send/1423](http://www.brocku.ca/webfm_send/1423)”, download a copy of the medical form and fill out it properly.

(2) To pass the course both a passing mark and a score of at least 30 % on the final are required.

(3) The assignments are due in the box outside Room J434 at 4 pm on the due dates. **No late assignments will be accepted.** The solution to each assignment will be placed on reserve in the library after the due date. Please attach a cover page to your assignment. This should bear (at the top) **your name, student number, course number and assignment number.** A sample assignment cover page can be found in the **Course Home Page.**

(4) **Plagiarism:** You may discuss the problems with other students; however, **the final submitted work must be your own.** Any evidence of copying will result in a mark of 0.

(5) **Withdrawal Date:** Friday, Nov. 4, 2011 is the **last date** for withdrawal from the course **without academic penalty.**