

# Mathematics 115: Winter Term 2006/07

Instructor: James Preen (email: james\_preen@cbu.ca)

Office: A-129A (first floor, A-wing, at the bottom of the ramp)

Office Hours: Before class or by appointment

Class meetings: Lectures Tues, Thurs 4:30 - 6:30pm in Room B227;  
Labs/Tests usually Thursdays 5:30-7:00pm in Room B1022

Textbook: "Elementary Linear Algebra" by W. Keith Nicholson

	Assignments	20%
Grading:	Mid-term test	20%
	Final exam	60%

There will be one mid-term test, held in place of a lab session sometime in February. The Final exam will be held during the regular examination period in April. Upon completion of each section of the book some sort of test or assignment will be given. All tests including the final examination will be "open-book" in that any material can be consulted during the test.

Lab sessions will be primarily devoted to aspects of the Maple software package used for matrix and vector manipulations. Topics considered in lab will ordinarily be tied to those discussed in class. Occasionally students will be required to complete a specific assignment in the lab itself.

Academic regulations concerning penalties for plagiarism and cheating (pp. 225-226 of the university calendar) will be rigidly enforced in this course. A supplemental exam for the course will not be made available.

The website for the course is

<http://faculty.capebretonu.ca/jpreen/115/math115.html>

## Major Topics:

- Matrices and Systems of Linear Equations
- Determinants, Vector Spaces
- Eigenvalues and Linear Transformations
- Orthogonality
- Numerical Linear Algebra