## Mathematics 1204: Winter Term 2015/16

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

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

Office Hours: Tuesdays and Thursdays 11:30 - 13:00 or by appointment

Class meetings: Lectures: 13:00 to 14:15 Tuesdays and Thursdays in A235

Labs/Tests: Currently scheduled for 17:30 to 18:45 on Mondays, may change

Textbook: "Elementary Linear Algebra" by W. Keith Nicholson (optional)

Website: http://faculty.capebretonu.ca/jpreen/1204/math1204.html

Grading: Coursework 40%, Mid-term test 20%, Final exam 40%

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 course some sort of test or assignment will be given which will count towards the coursework mark. All tests including the final examination will be "open-book" in that any printed material can be consulted during the test, but only simple calculators will be allowed.

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. Students will be required to complete at least one specific test or assignment in the lab itself.

The use of electronic devices in class is allowed, boards can be photographed, explanations can be recorded and Maple will be regularly used and worksheets will be available for copying or download. Students are encouraged to ask for clarification on the material both during and after classes. Class will only be cancelled if campus is closed.

Academic regulations concerning penalties for plagiarism and cheating (page 38 of the university calendar) will be rigidly enforced in this course. Differently-abled students will be accommodated using the JKAC. A supplemental exam for the course will not be made available.

## **Major Topics:**

- Matrices and Systems of Linear Equations
- Determinants and Eigenvalues
- Solution of Systems and Recurrences
- Geometric Vectors
- Vector Spaces