Math 307 – 202, Applied Linear Algebra, Spring 2018

Time and Place: TuTh 11-12:30, LSK 200.

Instructor: Kalle Karu. Office: 213 Math Bldg. Phone: 822-4787.

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E-mail: karu@math.ubc.ca.

Office hours: Mon 2-3, Thu 12:30-1:30. (These are for the first two weeks only.)

Textbook: We will use online lecture notes posted on the course website.

Website: www.math.ubc.ca/~karu/m307.

Topics: The lecture notes for this course contain a range of interesting applications of linear algebra, such as cubic splines, Fast Fourier Transform, Markov chains, Google page rank and others. We will cover a selection of these topics. For each topic we will discuss the required background theory and do actual computations.

Homework. Weekly homework assignments will be posted on the course website. Homeworks are collected in class. Late homework will not be accepted, but the lowest homework score will be dropped from the final grade.

Exams. There will be one midterm exam on Thursday, Feb 15, during class hours. The final exam time will be announced later.

Quizzes. We will have four 10-minute quizzes in class. The quizzes are on Thursdays, Jan 18, Feb 1, Mar 15, Mar 29.

Matlab/Octave. An important part of the course is doing practical computations using the Matlab or Octave computer systems. Homework problems typically ask you to do computations in Matlab/Octave. The course web site explains how to download one of these systems.

Evaluation. Your final grade comes from:

- Homework 10%.
- Quizzes 10%.
- Midterm exam 30%.
- Final exam 50%.