Math 307 – 202, Applied Linear Algebra, Spring 2019

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

Instructor: Kalle Karu. Office: 213 Math Bldg. Phone: 822-4787. E-mail: karu@math.ubc.ca. Office hours: TBD.

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. Homeworks will be posted weekly. 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 two midterm exams: on Tuesdays, Feb 12 and March 19, during class hours. The final exam time will be announced later.

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%.
- Midterm exams 20% each.
- Final exam 50%.