

# Aero 320: Numerical Methods

## Lab Assignment 10

Fall 2013

### Problem 1

#### Gauss elimination

Write C++ code to solve the matrix equation  $Ax = b$  using Gauss elimination

(a) without partial pivoting,

(b) with partial pivoting.

(c) Compare your results in part (a) and (b) for examples given in class. Also try when  $A$  is a  $5 \times 5$  Van der Monde matrix, and the  $b$  is constructed such that the true solution is  $x = \{1, 1, \dots, 1\}^\top$