# ENCE 724/BMGT 832 Nonlinear Programming Spring 2005 Dr. Gabriel

#### Homework #3

Given out: February 10, 2005 Due at start of class: February 17, 2005

#### Note:

Homeworks will be collected at the start of the class and each week several students will be selected to present their homeworks to the class during the first 15 minutes. Five minutes (or less) will be devoted for each question.

## Reading:

Chapter 4 in course text

Section: 4.1

Section 4.2 pp. 138-145 (just before Fritz John conditions)

Section 4.3: pp.156-158 (just before Fritz John conditions)

### **Text Problems:**

4.1, 4.4

Solve 4.1 and 4.1 using MATLAB. For example, consider the two unconstrained optimization functions:

fminsearch - Multidimensional unconstrained nonlinear minimization, by Nelder-Mead direct search method.

fminunc - Multidimensional unconstrained nonlinear minimization

Supply all code and output.