Engr325

Lab #5

# **Mobile Devices**

Name	_	
Partner (s)	Grade	/10

### Introduction

• The goal of this lab is for you and your lab mate(s) to be creative and think of a use for the sensors in your mobile devices.

#### **Objectives**

- Stimulate creative thinking;
- Successfully link a mobile device to a Matlab session;
- Post–process the data appropriately.

### **Equipment Provided**

• Lab station.

### References

- Instrumentation text book;
- Course web page.

### Procedure

- It's time for you to get your creative juices flowing. You will do so by collaborating with your labmate(s) to generate a new and creative use for the sensors in your mobile devices. Here is a list of tasks to accomplish:
  - Download the mobile Matlab app to your smart phone.
  - Get it communicating to your personal copy of Matlab on your (or your lab mate's) laptop.
  - Download data from one or more sensors into Matlab.
  - Process the data.
- It's up to you to decide what to do with the data. Any tools available in Matlab are fair game for data analysis and presentation.

## To Turn In

Each person needs to staple the following items to this handout and turn them in:

- One-page summary of your idea, implementation, and result;
- Plots as appropriate;
- Anything else that will help document your application.

Also, place a copy of your verbosely commented Matlab code in the lab#5 drop box on D2L.