

Medical Electronics IV Class Lab #2 and #3
March 31, 2008

Objective:

Interfacing a number of devices to microcontroller and building a small project with all devices working together.

Lab Requirements:

1. Develop the microcontroller code in either assembly or C language to interface 5 peripheral devices of your choice to the microcontroller kit you have available. Your grade for Lab #2 will be given based on your demonstration that the interface with each of the 5 devices works individually.

2. Develop a small project involving the 5 peripheral devices in the above requirement such that they all work together simultaneously in the same project. You are required also to demonstrate your knowledge of the following aspects in your project:

- a. Timer programming
- b. Interrupt enabling/disabling and service handling
- c. Polling

Your grade for Lab #3 will be given based on fulfilling the requirements of this part.

Grading:

Provide a brief report of your work and show the teaching assistant the results of your implementation of the requirements. It is understood that he may test your knowledge of the other parts as well. Each project is worth 5 points in your grade (i.e., 10 points for both projects). You have two lab sessions to finish the requirements and you can show all or part of your work for labs #2 and #3 on either of the two sessions. You can submit your report one week after the end of your second lab session.