

**ECE 567****Microprocessor Lab****Autumn 2009**

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**Website:** <http://www.ece.osu.edu/~chenye/ece567>

**Material:** ECE 567 notes from UniPrint  
 ECE 567 Lab Kit - Each 3-person group only needs one kit.  
 Pay for and receive lab kits in the ECE office (DL 205).

**Reference:** ECE 265 Book – specifically chapters 3&4

**Software:** [http://www.ece.osu.edu/~orin/ece265/THRSim11\\_OSU\\_disk1.zip](http://www.ece.osu.edu/~orin/ece265/THRSim11_OSU_disk1.zip)  
[THRSim11\\_OSU\\_disk2.zip](http://www.ece.osu.edu/~orin/ece265/THRSim11_OSU_disk2.zip) Username: ECE265  
 Password: HC11

**Grading:** 3 Labs (Lab 2-4)  $3 \times 20\% = 60\%$   
 3 Quizzes  $10\% + 15\% + 15\% = 40\%$   
 100 %

**Schedule:**

Week: Lecture Date	Lab Tasks
1: Sep 29	Lab 1
2: Oct 06, Quiz 1	Lab 2
3: Oct 13	Lab 2
4: Oct 20	Lab 2
5: Oct 27, Quiz 2	Lab 3
6: Nov 03	Lab 3
7: Nov 10	Lab 4
8: Nov 17	Lab 4
9: Nov 24, Quiz 3	Lab 4
10: Dec 01	Lab 4

**General instructions:**

- No report is needed for lab 1. For labs 2-4, you need to follow the report format given by your lab instructor.
- The completion of each task and the outputs obtained should be demonstrated to the instructor for verification.
- You will use the same breadboard for all the labs. Keep the wiring from each lab intact so that you can reuse it in the subsequent labs.

**Course objectives:**

- The students will learn how to design, build, and debug simple microcontroller based systems.
- The students will learn how to use an emulation environment, along with software support such as text editors, assemblers, etc. in the development of system designs.
- The students will learn about applications of microprocessors/microcontrollers to serial communications, data acquisition, etc.
- The students will work in groups of 2 to 4 and thereby learn how to cooperate in teams.