ECE 410, Spring 2013
Introduction to VLSI Design (tentative)

Lecture: MWF, 11:30 12:20, Room 08 Urban Planning (May move to EB??)

Instructor: Dr. Fathi M. Salem, Office: 2308D EB, Email: salem@egr.msu.edu

Office Hrs.: M W F 1-2 p.m.

Patrick O’hara– TA & Lab (NO LAB THE FIRST WEEK. ROOM TO BE CONFIRMED)

TA Hours: All in rm 1312EB (this rm is reserved for the LABS of ECE 410 students) 7-10pm:Wednesdays and Thursdays; 3-6pm on Thursdays. Other times may become available.

LAB Room: 1312 EB* (Unix Machines)

*OPEN LAB CONCEPT: You may work on your assignments in any available UNIX lab, at any time you wish. The Lab times are when the TA will be available to answer your questions.

Course Website: This Semester, we will use the angel management website via (https://angel.msu.edu). We may have a website as well.

Prerequisite: ECE 230, 302, and 303


Supplementary Textbooks (optional):


Catalog Description:


Attendance and Conduct in Class:

Students are expected to attend class and be bright and cheerful with lots of questions. It will be hard to do well in this class without attending the lectures. It is the student’s responsibility to get notes and handouts for any missed class. Lecture notes, HWs, and handouts will be posted on ANGEL frequently.

Grading:

30% Two Midterm Exams (dates: Tentatively, 02/15/13 and 04/12/13)
15% Homework *
5% Quizzes or Check-ins test*
25% Lab Assignments (Lab 1-7)*
25% (Labs 8-10) Group Lab Project (15%) and final project Lab demo (10%)*

* must obtain a passing grade of 60% or better to pass the course

The Final Exam (Thursday, May 2, 2010, 10-12 (noon), this time may be changed) will be an in-lab test of skills learned in lab assignments and the design project demo. Up to ten homework assignments will be due weekly before class on Mondays. Approximately 5-10 5-minute quizzes/Check-ins may be given during class on random days.
Lab Assignments and Lab Project:

Lab Assignments using Cadence VLSI design software (available in all Engineering UNIX labs, including rm 1312 EB) will be an integral part of this course. There are no set lab times, but the UNIX lab in EB 1312 has been reserved for ECE410 during several 3-hour blocks. During these times the TA will be available to help answer questions. Details of each assignment will be posted on the course via ANGEL. Each student will have a UNIX class directory at /classes/ece410/username.

Each Lab Assignment will have specific deliverables which must be turned-in by 10 pm on Thursday of the week due. There will be approximately 8 lab assignments (6 individual and 2 group) and a 2-part group lab project with a report. Lab assignments will be assigned and due weekly with a brief lab report required for each lab. Grades will be evaluated by your TA and are 80% based on the quality of your work and 20% on the completeness of your report. The lab project will be done in 3-4 person groups and grades will be assigned according to the following breakdown.

10% Proposal  20% Phase A  30% Phase B  15% Individual  25% Report

Other Policies:

- Cheating in any form will not be tolerated! This includes copying homework, copying circuit design files, cheating on exams, or any other form of unethical behavior.

- There is no makeup for missed quizzes. If you have an excusable absence and notify the instructor by email before class begins, missed quizzes will not count against your grade.

- Homework can be done in groups but must be turned in individually. Direct copying of homework will result in a zero-point score for all people involved.

- Homework must be turned in at the beginning of class on the date it is due (generally Mondays). No late homework will be accepted.

- Lab Assignment must be turned-in by 10pm on Thursday of the week due. Timestamps on CAD files will be checked to ensure work was completed on time.

- Makeup exams will only be allowed for written excused absences and only when the instructor is informed before the exam. Makeup exams will be oral exams given after the exam date.