ECE 244: Digital Logic Design

Lecture Information

Time: MWF 10:00-10:50am  
Office Hours: M-W 11-12:30pm, or by appointment  

Instructor: Dr Ankur Srivastava, 1349 A.V. Williams Building, ankurs@eng.umd.edu, http://www.ece.umd.edu/~ankurs

JMP 3201

Class Url: http://www.ece.umd.edu/class/enee244-2.F2005/ (subject to change)

Grading Policy

Homework : 20 %
2 Midterms : 20% Each
End Term: 40%

Exam:

- All exams will be closed book, closed notes, no calculators or PDAs, and please turn off the cell phones.
- **There will NOT be any make-up midterm exams.** If you have to miss a Mid-Term, then you must get Dr Srivastava’s permission at-least 2 days before the exam. In that case your other midterm will be counted twice. If you do not take permission then you get a 0. If you miss both Mid Terms with Dr Srivastava’s permission, you will be graded out of your finals. You get a 0 if no permission is taken at least 2 days in advance.
- Please contact Dr Srivastava within 1 week of the date of return if you contest your score in the mid-term. No changes will be made after this period.
- Check final exam schedule before enrolling for the course. Professor Charles Silio is offering another section.
- If any exam (especially the final exam) is scheduled on a religious holiday that you are compelled to observe and you must make arrangement to take the exam on a different date, please see Dr Srivastava about making these arrangements.
- **Academic dishonesty will not be tolerated.** The University Code of Academic Integrity, which can be found at http://www.inform.umd.edu/CampusInfo/Departments/JPO/ prohibits students from committing the following acts of academic dishonesty: cheating, fabrication, facilitating academic dishonesty, and plagiarism. Academic dishonesty in this class includes outright copying on homework; however, discussing homework problems and exchanging tips is permissible and also encouraged. If there are any take-home exams, discussing the material with anyone, inside or outside of the class, is considered academic dishonesty. Instances of academic dishonesty will be referred to Office of Judicial Programs.
Homework

- There will be several homeworks. Homework assignments will be posted on the course webpage and announced in the lecture, normally at least one week before the due date. Homework will be collected in class on the due date and the graded homework will be returned to you in the recitation sections.

- **Late homework will not be accepted.** If you must miss a lecture where a homework assignment is due, it is your responsibility to find a reliable person to turn your homework in for you or submit it to Dr. Srivastava or your recitation TA before the due date.

- Both effort and correctness will be counted when your homework is graded. It is important that you do the homework problems in the same order as they are assigned.

- If you dispute your score on any homework, you have to contact your recitation TA within one week from the date that your homework is officially returned (normally in recitation). If the matter remains unsettled, you have one more week to bring the issue to Dr. Srivastava with a written request.

- Make sure that you include the following information on the first page of your homework: full name, student ID, and your recitation section number (on the upper right corner). Failure to do so will result in late grading of your homework, and you may consequently miss the one-week period to dispute your score.

- It is acceptable, and you are encouraged, to discuss homework problems with others, but you have to prepare the final write-up by yourself. Both copying homework and allowing others to copy your homework will be considered as academic dishonesty (see above in the last item in the Exam section).

Broad Course Topics (subject to change)

1. Binary Numbers
   a. Binary Arithmetic
   b. Binary Conversion
   c. Binary Codes
   d. Error Detection and Correction
2. Boolean Algebra
   a. Canonical Forms
   b. Boolean Manipulations
   c. Gates and Combinational Networks
   d. Don’t Cares
   e. Gate Properties
3. Simplification of Boolean Algebra,
   a. Prime Implicants
   b. Karnaugh Maps
   c. Quine-McCluskey Methods
4. Logic Devices and Components
   a. Adders, Subtracters
b. Decoders, Encoders, Multiplexers
   c. PLAs and PALs, ROMs
5. Latches and Flip Flops
6. Sequential and Synchronous and Asynchronous Circuits
7. Control Logic and Wired Logic and Logic Gate Characteristics

Recitations
TA: Fiorella Haim  fiorella@eng.umd.edu

11:00am-11:50am (EGR 3114) Wed
9:00am- 9:50am (EGR 3114) Wed
11:00am-11:50am (CHE 2116) Tue
12:30pm- 1:20pm (CHE 2116) Tue