

CDA 4203 Computer System Design - Spring 2006

Course Description: This course provides the fundamentals of digital logic and computer system designs. The following topics will be introduced in the course:

- Number systems and coding
- Combinational Logic, Algebraic Manipulation, Logic Minimization
- Medium Scale Logic Building Blocks (decoders, multiplexers, encoders, etc.)
- Digital Arithmetic
- Sequential Logic
- State Machine Design (registers, etc)
- Memory
- Programmable Logic Devices
- Basic Computer System Design

Prerequisites: Basic knowledge of mathematics and computers, CDA 3103, CDA 3201, CDA 3201L

Textbook: Logic and Computer Design Fundamentals, Third edition, M. Morris Mano and Charles R. Kime, Pearson Prentice Hall, 2004.

Class Hours: T/R 11:00 – 12:15

Classroom: EMC 100

Instructor: Prof. Soontae Kim

Phone: (813) 974-2114 (office)
Email: skim@csee.usf.edu
Class home page: Blackboard System
Office: ENB 340
Office Hours: T/R 1:00 – 2:30 R or appointment

TA: Aswath Oruganti

Phone: (813) 974-1346 (office)
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Office: ENB 222
Office Hours: M/W 3:30 – 5:00

Email and Announcements:

- **Email:** The professor will be using email throughout the semester to communicate with the class. The professor encourages students to use email for efficient communication.
- **Announcements:** Major announcements that are made to the class during lectures or via email will also be posted on Blackboard System of this class. So check the class web page regularly.

Grading Policy:

Your final grade consists of the following three parts:

20% Quizzes

20% Homework assignments

60% Exams (3 equally weighted)

Letter grade will be given in this course, which is tentatively based on the following table:

A+ 95-100%

A 92-95%

A- 88-91%

B+ 84-87%

B 80-83%

B- 76-79%

C+ 72-75%

C 70-75%

C- 66-69%

F 0-65%

Exams:

There will be two **in-class** midterm exams.

Midterm 1: Feb 14 (Tuesday)

Midterm 2: Mar 21 (Tuesday)

Final: May 2 (Tuesday) 10:30 a.m. –12:30 p.m.

Homework assignments:

Homework assignments will be distributed **biweekly** and solutions will be provided on Blackboard System. Your homework assignments must be submitted **before class**. There will be **no extensions to due** except in cases of **verifiable** emergencies. All homework submissions must be **stapled in the upper left-hand corner** (no paper clips). All homework submissions must include the first page of the assignment as a **cover page** (do not fold the solutions).

Quizzes:

Quizzes will be given **biweekly** to check if you have done the assigned homework for yourself and your class attendance. There will be **no make-up quiz** except in cases of **verifiable** emergencies.

Academic honesty:

Department policy dictates that if you are academically dishonest, you will get a "F" in the course. On exams and quizzes you must submit your own work and you may not give or receive help. On homework assignments you must submit your own work. Submissions that contain identical text and/or code are clear evidence of cheating.