Computer Organization and Architecture  CPS 2390-01

Instructor:  Dr. Jing-Chiou Liou
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Class Room:  HH 222
Class Hours: Tuesday 4:30 – 7:15PM
Office Hours: Monday – Thursday. Details provided separately.
Instruction Method:  Lecture & Lab.

Textbook:
PowerPoint slides will be used in class.

Grading:  Homework (8+1) 20%  Midterm 25%
Final 25%  Lab. (6 reports) 30%

Course Description & Objectives:
This course is a study of computing systems to provide students fundamental concepts on computer organizations and architectures.

Upon completion of the course, students will be able to analyze digital logic systems that serve as the building blocks of any computing system, understand and utilize assembly language in performing computing routines, subroutines, and I/O control. In addition, students will learn other computer structures in a high level language and programming methodology.

Homework Assignments (HAs) and Lab. Report (LRs) submission policy:
•  Students are expected to submit HA and/or LR in the following week of the session, unless is mentioned otherwise.
•  Late submission is allowed for up to a week delay, with a 10% deduction in grade.

Important University Dates:
1/26/10: Last day to withdraw w/ 100% refund
2/03/10: Last day to withdraw w/ 75% refund

Academic Integrity Policy:  http://www.kean.edu/forms/AcademicIntegrity.pdf
Tutoring and learning Support services:  http://www.kean.edu/~castutor
Schedule:
1/19: Overview: Introduction to Computing Systems
1/26: Bits, Data Types, and Operations
2/2: Digital Logic Structures
2/9: Von Neumann Model
   Lab Introduction: Procedures/Safety
2/16: The LC-3
   Lab 1: A Simple LC-3 Program
2/23: Programming
   Lab 2: Problem Solving with the LC-3
3/2: Course Review
3/23: Midterm Review / Assembly Language
   Lab 3: A Simple Assembly Language Program
3/30: Assembly Language
   Lab 4: Beyond the Assembly of Single Assembly Language Program
4/6: I/O
   Lab 5: I/O Routines
4/13: Trap Routines and Subroutines
   Lab 6: LC-3 Trap Routines and Subroutines
4/20: Stack
   Lab 7: A Scientific Calculator
4/27: Course Review
5/4: Final Exam