Computer Organization and Architecture  CPS 2390-01 Fall 2015

Instructor:  Dr. Jing-Chiou Liou
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Class Room:  N221
Class Hours:  Tuesday & Thursday 2:00 PM – 3:15PM
Office Hours:  Monday – Thursday. Details provided on my Web site.
Instruction Method:  Lecture & Lab.

Textbook:
PowerPoint slides will be used in class.

Grading:  
Homework 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 paper format 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.

HAs/LRs and Exams Integrity policy:  You must submit your own works. Your answers/program will be considered as plagiary, if:
- You copy/receive idea(s) or piece(s) of answer/program from someone without instructor’s permission.
- Your answers/programs are exactly the same as or very close in structure to others and cannot provide a reasonable explanation.
Important University Academic Information:
The Kean Academic Calendar is online at http://kean.edu/offices/registrar/academic-calendar
Student Code of Conduct: http://www.kean.edu/policies/code-of-conduct
Tutoring and learning Support services: http://www.kean.edu/content/tutoring-services

Schedule:
9/1&9/3: Overview: Introduction to Computing Systems
9/8&9/10: Bits, Data Types, and Operations
9/15&9/17: Digital Logic Structures
9/22: Von Neumann Model
9/24: Lab Introduction: Procedures/Safety
9/29: The LC-3
10/1: Lab 1: A Simple LC-3 Program
10/6: Lab 1: A Simple LC-3 Program
10/8: Programming
10/13: Lab 2: Problem Solving with the LC-3
10/15: Lab 2: Problem Solving with the LC-3
10/20&10/22: Course Review
10/27: Midterm Exam
10/29: Midterm Review
11/5: Assembly Language - I
11/10: Lab 3: A Simple Assembly Language Program
11/12: Assembly Language - II
11/17: Lab 4: Encryption and Decryption - I
11/19: Lab 4: Encryption and Decryption - II
11/24: I/O
12/1: Trap Routines and Subroutines
12/3: Lab 5: I/O Routines
12/8: Stack
12/10: Course Review
12/15: Final Exam