DESIGN AND ARCHITECTURE OF COMPUTER SYSTEMS
CS161 SYLLABUS
Spring 2011

INSTRUCTOR: Laxmi.N. Bhuyan (http://www.cs.ucr.edu/~bhuyan/)
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LECTURE TIME: T,Th 2.10 – 3.30 pm **PLACE:** OLMH 1136
OFFICE HOURS: W 3.00-4.30 or By Appointment

TEXT: John L. Hennessy & David A. Patterson: *Computer Organization and Design: The Hardware/Software Interface*, Morgan Kaufman Publishers Inc., 2009, 4th Ed.

COURSE OUTLINE: This course will show the relationship between hardware and software and focus on computer architecture and design. It will also show the students (1) the forces of rapidly developing VLSI technology, which drive the development of the new architectural techniques, (2) the decisions that must be made to develop a successful design, and (3) performance criteria that can be used to make these design decisions. The course is covered by the following chapters from the textbook.

Chapter 1: Introduction
Chapter 2: MIPS Instructions
Chapter 4: The Processor
Chapter 5: Memory Hierarchy
Chapter 6: I/O System

PREREQUISITE: The student is expected to have an elementary knowledge of assembly language programming (CS061) and digital system (CS120B).

CO-REQUITE: CS 161 L

GRADING:
Test 1(Chapters 1 and 2): 25%
Test 2 (Chapter 4): 30%,
Test 3 (Chapters 5 and 6): 25%,
Homework: 20%.

Note: Final grading will be based on curve. No make-up examination is allowed unless permission is obtained from the instructor prior to the exam date. Appropriate penalty will be imposed for late submission of homework.