Computer Organization (810:041) Fall 2008

Time and Place:    Section 01 is 8:00-9:15 AM Tuesday and Thursday in ITTC 328
                   Section 02 is 2:00-3:15 AM Tuesday and Thursday in ITTC 328

Web-site:  www.cs.uni.edu/~fienup/cs041f08/

Class Email List:  Send messages to 810-041-01-fall@uni.edu or 810-041-02-fall@uni.edu from your UNI
                   account (let me know other email addresses that you want to use)

Instructor:  Mark Fienup (fienup@cs.uni.edu)
Office:  ITTC 313
Phone:  273-5918  (Home 266-5379)
Office Hours:  M 9-11, 1-2; T 9:30-10:45; W 9-10, 1-2; Th 9:30-10:45; F 9-11

Pre- or Corequisite:  None (Corequisite of Intro. to Computing (810:051) or equivalent is advisable)

Goals:  After this course, you should understand: (1) simple combinational and memory circuits used to build
        computer components, (2) how these circuits are organized to build a computer, (3) how data is represented
        and manipulated on the computer, (4) how to program in assembly language, (5) how high-level language
        programming languages are implemented with respect to the run-time stack and built-in data structures such
        as arrays and records, and (5) general concepts of hardware support necessary for an operating system.

               Lobur; Jones and Bartlett Publishers; 2006; ISBN-10:  0-7637-3769-0.  (Book will probably be used in
               Computer Architecture, 810:142, too!)

Assignments:  Assignments will be both "pencil-and-paper" exercises and assembly-language programming.

Pedagogic Approach:  In class, I'll tend to break up the lecture with active and group learning exercises to
                     aid learning.  While this is not formally graded, part (5%) of your grade will be based on your participation in
                     these in-class activities.  Students benefit by (1) increased depth of understanding, (2) increased comfort and
                     confidence, (3) increased motivation, and (4) being better prepared to work in groups on the job.  This might
                     sound great, but it will require you (and me) to work differently to prepare for class.  Before the class, you
                     must read the assigned reading, thought about what I’ve asked you to think about, etc.; otherwise you won’t
                     be able to effectively participate in your group during class.

Grading policy:  There will be three tests (including the final).  I'll announce tests at least one week in
                 advance to allow you time to prepare.  Tentative weighting of course components is:
                 In-class Work:  5 %
                 Assignments:  25 %
                 In-class Test 1:  23 % (~October 9)
                 In-class Test 2:  23 % (~November 13)
                 Final:  24 %  (Both sections:  Tuesday, December 16 from 8-9:50 AM in ITT 328)

                 Grades will be assigned based on straight percentages off the top student score.  If the top student's score is
                 92%, then the grading scale will be, i.e., 100-82 A, 81.9-72 B, 71.9-62 C, 61.9-52 D, and below 52 F.  Plus
                 and minus grades will be assigned for students near cutoff points.

Special Notice:  In compliance with the University of Northern Iowa policy and equal access laws, I am avail-
                 able to discuss appropriate academic accommodations that may be required for students with disabilities.
                 Requests for academic accommodations are to be made during the first three weeks of the semester, except
                 for unusual circumstances, so arrangements can be made.  Students are encouraged to register with Student
                 Disability Services, 103 Student Health Center, to verify their eligibility for appropriate accommodations.