Computer Organization CSCI-2500
Fall 2005

Course: CSCI-2500
Lectures: Mon, Thu 10:00-11:50 Ricketts 203
Home Page: http://www.cs.rpi.edu/~hollingd/comporg

Instructor: Dave Hollinger
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Office Hours: Wed 3:00-5:00 (or by appt.)

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Texts: *Required:* Computer Systems: A Programmer's Perspective
Randal Bryant and David O'Hallaron
ISBN: 013034074X

Grading: Lab: 10%
Midterm Tests (2): 30%
Homework(6?): 35%
Final Exam: 25%

Course Home Page: The course home page will include homework assignments, lecture notes, references, handouts and announcements. Hardcopy of any class handouts will be provided only on request.

Homework: All homework must be done individually. Once assignments are made, the course home page will contain information on what is expected for homework submission. Some assignments will be submitted electronically.

Homework and Test Grading: Adjustments to homework and test grades will take place only during the week after grades have been returned to students. This means that you must bring any problems to our attention within one week of receiving a grade.

Labs: Labs will start on September 7th. You receive one point for each lab you attend and attempt. Completion of lab exercises during the lab meeting is not necessary to receive credit for the lab. There will be at least 12 lab meetings, you only need to attend 10 to get full credit for lab (there is no extra credit if you attend more than 10 labs). There will be no makeup labs.

Cheating will not be tolerated. Any duplicate or near duplicate submissions will result in a minimum of a 2 letter grade drop for the final course grade for all students involved and may result in a failure for the entire course. For programming projects, you may *discuss* homework with other students, but sharing of code in any form is not acceptable (this means that looking at another student's code or showing your code to another student is **not** permitted). If you need help with a project - send mail to the T.A.s and Dave. Please contact the instructor if there is any part of this policy you do not understand.

Final Exam: The final exam will take place during finals week. The exam will include material from the entire course (this will be a comprehensive exam).

Tentative Lecture Topic and Reading Schedule

Week of		Topics	Readings
August	29	Course Introduction Data Representation	Chapter 1 2.1, 2.2
September	*5	Integer Representation and Arithmetic Unix and C Programming	2.3
	12	Floating Point Program Representation Instruction Sets	2.4 3.1-3.3 3.4,3.5
	19	Instruction Sets: Control, Procedures, Arrays, Programs	3.6-3.15
	26	Review (Mon) and Test #1 (Thurs)	
October	3	Processor Architecture:Y86	4.1
	10	Logic Design Sequential Y86 implementation	4.2 4.3
	17	Sequential Y86 implementation (cont.) Pipelining	4.3 4.4,4.5
	24	Optimization	Chapter 7
	31	Review (Mon) and Test #2 (Thurs)	
November	7	Memory	6.1-6.3
	14	Memory	6.4-6.7
	*21	Measuring Performance	Chapter 9
	28	Virtual Memory	10.1-10.6,10.9
December	5	Virtual Memory, Review for Final Exam	

* is short week (one lecture)

TESTS: Sept 22nd and Nov 3rd (in class)

Final Exam: date to be determined (during finals week).