

Computer Organization CSCI-2500

Spring 2004

Course: CSCI-2500 CRNs: 95800, 95801, 95802
Lectures: Tue, Fr 2:00-3:50 DCC 330
Home Page: <http://www.cs.rpi.edu/~hollingd/comporg>
Email: comporg@cs.rpi.edu

Instructor: Dave Hollinger
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Office Hours: Mon 10-12, Wed 3-5 (or by appt.)

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

Suggested: The C Programming Language, 2nd edition
Kernighan and Ritchie
ISBN: 0131103628

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: Lab schedule and grading policy will be made available at the first lab (Jan 21st).

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 comporg@cs.rpi.edu. 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
January	13	Course Introduction Data Representation	Chapter 1 2.1,2.2
	20	Integer Representation and Arithmetic Unix and C Programming	2.3
	27	Floating Point Program Representation Instruction Sets	2.4 3.1-3.3 3.4,3.5
February	3	Instruction Sets: Control, Procedures, Arrays, Programs	3.6-3.15
	10	Review Tue and Test #1 (Fri)	
	*17	Processor Architecture: Y86	4.1
	24	Logic Design	4.2
		Sequential Y86 implementation	4.3
March	2	Sequential Y86 implementation (cont.) Pipelining	4.3 4.4,4.5
	9	Spring Break	
	16	Optimization	Chapter 7
	23	Review (Tue) and Test #2 (Fri)	
	30	Memory	6.1-6.3
April	6	Memory	6.4-6.7
	13	Measuring Performance	Chapter 9
	20	Virtual Memory	10.1-10.6,10.9
	*27	Review for Final Exam	

* is short week (one lecture)