

# Computer Organization CSCI-2500

Fall 2001


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Course: Computer Organization CSCI-2500  
Lectures: Mon, Thu 2:00-3:50 Sage 3510  
Home Page: <http://www.cs.rpi.edu/~hollindg/comporg/>  
Email: [comporg@cs.rpi.edu](mailto:comporg@cs.rpi.edu)

Instructor: Dave Hollinger  
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Office Hours: Tue, Fri 3:30-5:30

Course Text:  **REQUIRED: Computer Organization & Design,**  
by Patterson and Hennessy. 2<sup>nd</sup> ed.  
Morgan Kaufmann  
ISBN: 1558604286

Grading: Tests (2) : 40%  
Homework: 30%  
Final Exam: 30%

**Course Home Page:** The course home page <http://www.cs.rpi.edu/~hollindg/comporg/> will include all homework assignments, class handouts and announcements. Some class notes and material related to specific topics not covered in the book will also be made available through the home page. Hardcopy of any class handouts will be provided only on request.

**Homework and Programming Projects:** All homework and programming projects must be done individually. Once programming assignments are made, the course home page will contain information on what is expected for project submission and directions for electronic submission.

**Grading Problems:** Any problems or questions about homework & test grading must be resolved no later than one week after the grades are made available to students. Test grades will be returned in class, some homework grades may be sent via email. No changes will be made to grades that are more than one week old.

**Cheating will not be tolerated.** Any duplicate or near duplicate homework/project submissions will result in *at least* a 2 letter grade drop from the final course grade for all students involved and may result in a failure for the entire course. You may *discuss* projects with other students, but sharing of answers or 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](mailto:comporg@cs.rpi.edu)! Please contact the instructor if there is any part of this policy you do not understand.

### Tentative Topic List and Readings

Week of	Topic	Readings
Aug 27	Course Overview, Unix & C Programming	notes, links
Sep 3 *	Unix & C Programming	notes, links
10	History & Performance	Chapters 1,2
17	Boolean Algebra and Digital Logic	Appendix B
24	Logic Design	Appendix B
Oct 1	Instruction Sets	Chapter 3
8	Assembly Language Programming	Appendix A
	<b>Test#1 (Oct 11<sup>th</sup>)</b>	
15	Computer Arithmetic	Chapter 4
22	DataPath & Control	Chapter 5
29	DataPath & Control	Chapter 5,
	Control System Hardware Design	Appendix C
Nov 5	Pipelining	Chapter 6
12	Pipelining	Chapter 6
	Memory Hierarchy	Chapter 7
19 *	<b>Test#2 (Nov 19<sup>th</sup>)</b>	Chapter 7
26	Memory Hierarchy	Chapter 7
Dec 3	Buses/Multiprocessing	Chapters 8,9

\* indicates short week (1 meeting)