California Institute of Technology
Department of Computer Science
Computer Architecture

CS184a, Winter 2005 — Course Information — Monday, January 3

Course Number:	CS184a	
Course Name:	Computer Architecture	
Term:	Winter 2005	
Time:	MWF 9:00AM–10:30AM	
Place:	Jorgensen 74	
Instructor:	Prof. André DeHon `<andre@cs.caltech.edu>`	
office	Jorgensen 258	x6569
Administrator:	Gloria Bain `<gloria@cs.caltech.edu>`	
office	Jorgensen 256	x6247
URL:	`<http://www.cs.caltech.edu/cs/courses/cs184/>`	

Student Requirements and Grading:

Grading is based on weekly assignments and a longer end-of-term assignment. (approximate weighting shown in brackets):

- Weekly Assignments [70%]
- Final Design Exercise [30%]

Grading and assignments may be very different in the spring term.

Writeups **must** be done in electronic form. Use CAD or drawing tools where appropriate. Electronic submission will be preferred (and may be required for some assignments). Handwritten assignments and hand-drawn figures are not acceptable.

We will probably not have a TA for this course. I would like to reserve the right to use one of the better solutions submitted to an exercise as a reference solution (creditted appropriately, of course). Please, indicate if you would prefer I **not** use your solution as such a reference.

Collaboration Policy Each student is expected to do his/her own work – including developing the details and writing the solutions. For the homeworks, you are free to discuss basic strategies and approaches with your fellow classmates or others, but detail designs, implementations, analysis, and writeups should always be the work of the individual. If you get advice or insights from others that significantly influenced your work, please acknowledge this in your writeups. A specific policy for the final project will be included with the project assignment.

Reading, Text, and Lectures Roughly one paper per lecture is expected reading. Most of the papers are electronically available through links from the course web page. You will be reponsible for acquiring those copies for yourself. Citations for additional reading material will be posted on the web along with the detailed syllabus (most of those also come with links to the papers themsleves). There is no required text as I will be pulling together material form many places. *Since this course is not based upon any particular text, following lecture will be essential to keep up with the course material.*

Hennessy and Patterson's *Computer Architecture A Quantitative Approach* is a classic text which some may find useful as a reference. We will be using it during the Spring quarter, so you might want to pick up a copy now. This course will take a much broader look at computer architecture than H&P. Consequently, we will cover considerable material outside of H&P, and we will cover little of the material in H&P at the level of depth presented there. Patterson and Hennessy's *Computer Organization and Design* provides a more elementary treatment and might be particularly useful for a review of logic design, computer arithmetic, and elementary RISC processor design for those who feel they need a deeper reference in these areas.

Course Materials Make sure you have access to an account in the CS cluster. I do expect writeups to be done in electronic form, and you can use those computers if you don't have your own.

- **computers:** If you don't already have a CS account, you should get one. You can use the computers in the CS Instructional Lab. To request an account, fillout the web form: `<http://www.cs.caltech.edu/cgi-bin/sysadmin/account_request.cgi>`
- **directory:** I will put course related material in `/cs/courses/cs184`.