Reports should be planned to take 25 minutes during a 30 minute period. They will be scheduled during May 2 through May 9. Three will be scheduled for each of the regular lecture times, and the the rest will be (tentatively) scheduled in 1 1/2 hour sessions during the Tuesday and Thursday afternoons, to be announced. The sessions will be organized by topic. Everyone is encouraged to come to all the sessions but you are required only to come to two of the outside of class sessions including the session of your report. Attendance will be taken.

I will give you materials for preparing slides. We can make transparancies made from printed copy and we can enlarge the size. In general, for a 25 minute lecture, between 6 and 10 slides should be used. Note that with 10 slides, the audience has an average of 2 1/2 minutes per slide—not much time! Sometimes it is difficult for beginners to choose the most crucial information, so, for the purpose of the course, a maximum of 12 slides will be enforced.

The Department has a computer and projector with PowerPoint available. You may use this but it is wise to make sure you know how to work the software well before you plan to complete your materials and are going to make the presentation.

The topic must stem from a topic covered in the course, specifically, performance evaluation, instruction set architectures (and related compiler and operating system issues), pipelined processors (and related compiler issues), caches and memory systems.

It must be a report on a refereed publication in the computer architecture research literature. There are two main choices: (1) An historic paper, such as those referenced in the HP’s textbook or reprinted in 25 Years of the International Symposium on Computer Architecture, Selected Papers edited by Gurindar Sohi (my copy will be in the Library reserve room under course CSI 504. (2) A recent paper, such as those published within 5 years in conference proceedings SIGARCH ISCA (Annual International Symposium on Computer Architecture) and ASPLOS (Architectural Support for Programming Languages and Systems), or the journals ACM Transactions on Computer Systems and IEEE Transactions on Computers. Papers from any other source must be approved by me first.

It is possible to report on details from a technical source such as the recently released Intel IA-64 Architecture Manual after you begin with references to a refereed publication.

Please see me to discuss topic possibilities if you want to, and in any case, see me as soon as you have selected a topic to discuss its feasibility and scope; and to reserve it. (If the particular paper is already reserved, I will try to help find an alternate. However, it would be best if you have some alternates too!)

The report proposal must include specific section or page references in the text that cover the basics of the chosen paper’s topic. These text sections are not necessarily assigned course readings. You are of course expected to understand this textbook material for your report topic.

When you propose a topic, you must give me the paper title, author(s), publication name, date and pages; plus the specific section or page references in HP’s text.

One legible copy of the paper is due on Thursday, April 27. This must be accompanied with your name and a statement of the sections or pages of HP that you recommend your fellow students to read in order to best understand the topic of your report. Prepare the
talk for the people in the class—what was covered in class is the audience background you can assume.

The talk must be composed of two sections:

1. A 5 to 10 minute review or explanation of specific pages from Hennessy and Patterson’s course textbook that introduce or give the background for the paper’s topic. You must write those page numbers on the blackboard before you begin.

2. The 15 to 20 minute report on the paper you have reviewed.

We will prepare a binder of copies of the papers of the reports. A page or two of notes or diagrams that you wish to supply for class distribution will be copied for the class. Here are some suggestions for finding topics.

- Browse the ISCA and ASPLOS conference and Transactions on Computers journal in ACM digital library http://www.acm.org/dl which you can access from any computer with an Albany campus IP address (169.226.*), such as those in the library.

- Look in the table of contents and through some of the introductions of papers of Sohi’s collection or the SIGARCH ISCA (Annual International Symposium on Computer Architecture) or ASPLOS (Architectural Support for Programming Languages and Systems) conference proceedings. Such tables of contents will be distributed in class. These issues are being placed in the SUNYA library reserve room on 3 hr. loan; check the online catalog under reserve books, course CSI 504. (You can borrow them overnight if you check them out late.) You can also copy up to 3 papers with CS dept copy machine.

Earlier issues can be found in the SUNYA library periodicals rolling shelf unit under “Computer Architecture News,” call number MAIPER TK 7885 A1 C653X, and recent issues are available in my office. You may find earlier issues of it in the book section under call number QA 76.9 A73 I58X (date).

- Look through the journals ACM Transactions on Computer Systems (MAIPER QA 76.5 A36X), IEEE Transactions on Computers (+++SPER TK 7885 A1 I58X) (these specialize in computer hardware topics), Computer (+++SPER TK 7885 A1 C65X), Communications Of The ACM (++SPER QA 76 A772), or ACM Computing Surveys (+++SPER QA 76.5 C617XA). You can also look at various IEEE computer architecture tutorials (call numbers near QA 76.9 A73).

- Look up papers or books referred to in Hennessy and Patterson’s bibliographies at the ends of the chapters we have covered.

- Anything else might be possible if it is technical enough. Discuss it with me. Consumer oriented publications (Byte magazine, press releases, most Web pages, etc.) might help you find a topic. However, their use without a computer science research oriented paper is generally NOT acceptable.