EE482B Advanced Computer Organization: Interconnection Networks Course Policy and Information

Room: Gates B01
Monday/Wednesday 9:30 to 10:45

Instructor: William J. Dally
billd@csl.stanford.edu
Gates 301
(650) 725-8945
Hours: MW 10:45 to 11:30 or by appointment

TA: Brian Towles
btowles@stanford.edu
Gates 216
(650) 723-0096
Hours:
M 3:00 to 5:00, Gates 200, (650) 725-3208
Th 10:00 to noon, Gates 200, (650) 725-3208
F 3:00 to 5:00, Gates 392, (650) 725-4982

Support: Pamela Elliott
pamela@csl.stanford.edu
Gates 303
(650) 725-3726

Web: http://cva.stanford.edu/ee482b

Goal

EE482B investigates topics in interconnection network architecture and design including network topology, routing strategies, flow control methods, deadlock and deadlock avoidance, congestion control, and router architecture. We will examine applications of networks to parallel computer interconnect, main-memory interconnect in multiprocessors, and switching fabric in Internet routers.

EE482B is a completely different course than EE482A, which is offered in alternate years and deals with the architecture of high-performance processors.

Assignments

There will be three homework assignments, a project, and a research paper. You will also be expected to scribe at least one lecture. The homework assignments will cover the basics of interconnection networks. The project will involve designing some aspect of an interconnection network taking advantage of *high-radix routers*. For the research paper you will be asked to investigate a current topic in interconnection networks, write a short paper on the topic, and present your results to the class.

Late Assignments

Homework is due at the **beginning** of class on the due date. There will be no credit given for late homework assignments. Local and Remote SITN students must turn in their assignments at the same time as on-campus students.

Collaboration

Collaboration on homework assignments, projects, research papers, and lecture scribing is encouraged subject to the following guidelines:

1. No more than four people can collaborate on a homework solution.
2. Groups of people working together should submit a single homework solution for the group.
3. Any assistance received in the solution of a homework assignment should be acknowledged in writing on the homework assignment.
4. If you collaborate in a group on lecture scribing your group may have to scribe as many lectures as there are members in the group.

Exams

There will be a Midterm exam held during the normal class time on **May 7.** The midterm will cover material up through that presented on May 5. Local TV students must come to Stanford to take the Midterm. Please plan to attend the midterm and organize your schedule accordingly. Alternative exam times will be made available only under extreme circumstances. Remote SITN students must observe the time limits for the midterm and must submit their completed exams no later than the end of the day on May 7. No credit will be given for late exams.

Requests to re-grade exams or homework must be submitted in writing within one week of the exam date. An exam submitted for re-grading might have all questions re-graded, not just the one(s) requested.

Grading

Homework Assignments	15%
Midterm	20%
Project	30%
Research Paper	20%
Class Participation	10%
Lecture scribing	5%

Text

Chapters of a textbook in preparation will be handed out at the lectures. A recommended book is:

Duato, Yalamanchili, and Ni, *Interconnection Networks: An Engineering Approach*, Morgan Kaufmann Publishers, ISBN: 1558608524.

Prerequisites

EE282 and permission of the instructor.