

CS430/CS630/CS730 - Computer Architecture

Text: Computer Architecture, A Quantitative Approach
Hennessy, Patterson

Important notes: (1) Class attendance is your responsibility. If you miss a class meeting, I will not give 'replays' under any circumstances. If you miss a class, it is your responsibility to discover what was covered and what you missed. (2) Missing an exam will result in a grade of zero unless you make arrangements prior to the time the exam is given. (3) Early exams are possible for reasonable circumstances. (4) any form of cheating, plagiarism, or other academic misconduct will result in a grade of F for the course. This includes copying any assignments, reports, programs or exams that are given as work to be done and turned in for a grade in this course. Helping others cheat is also a form of academic misconduct. For more information see the UAB web site.

This is a cross-listed course with both graduate and undergraduate students enrolled. Graduate students must meet higher expectations both on the exams. Each of the exams will include a set of questions for graduate students only, undergraduate students may answer them but they will not be graded. To avoid the occasional "bad question" each exam will be scaled, but the scaling will be done separately for the graduate and undergraduate exams, so that a "bad question" will not reduce the exam average grade.

The grading scale for undergraduate students is 85-100=A, 70-84=B, 60-69=C, 50-59=D, <50=F. For graduate students, the scale is 90-100=A, 80-89=B, 70-79=C, <70=F.

Office Hours: Tuesday-Thursday 12:30pm-2:00pm
Tuesday-Thursday 3:30pm-5:00pm

General Outline:

Chapter 1 Fundamentals of design

Chapter 2 Instruction set principles

Chapter 3 Instruction-level parallelism

Chapter 4 Exploiting instruction-level parallelism

mid-term exam (February 23)

Chapter 5 Memory hierarchy design

Chapter 6 Multiprocessors

Chapter 7 Storage Systems

Chapter 8 Interconnections and clusters

final exam (May 4, 1:30pm)