152 Dinece Science Library
2:00 - 3:15 PM, Thursday and Thursday
Fall 2000
Architectures
Programming, Algorithms and
CIS 5930-06 Parallel
Appointments may be arranged at anytime

Thursdays
Office Hours: 12:30 PM - 2:00 PM Tuesdays and

Email: gallivan@cs.fsu.edu

Office: 150 D Dirac Science Library

Phone: 5-0306

Instructor: K. A. Gallivan
MII (if any). Using your name in the form: LAST, FIRST.
Grades is also on the web page. Please register An electronic registry to enable you to review your
Homework and all other class handouts
Postscript and PDF versions of class notes
http://www.cs.ionic.edu/~gallivan follow teaching link
Course Web Page
Midterm and final are open notes.

Exercises will be explicitly marked.

Where grade is dependent on correctness will be

Homework will be graded mostly on effort. Problems

Assignments.

Homework will consist of exercises and programming

Grades: Homework 40%, midterm 30%, and final 30%
pieceling and architecture/algorithm interaction by one (Addison-Wesley, 1993) – Excellent discussion of
H. Stone, High-performance computer architectures.

- Very comprehensive bibliography.
- Solvers. Very comprehensive positive definite sparse
  Good tutorial on symmetric positive definite sparse
  matrix computations (SIAM, 1990) – Verly detailed discussion
  K. Gallivan et al., Parallel Algorithms for Matrix
  Simple and useful architecture/algorithm discussion.

- J. Oreas, Introduction to parallel and vector solution of

Reference texts are:

There is no textbook for the course. Some recommended
and need to consult original papers.
treatment of everything leads to quick mastery of book
subject and pointers to some key papers. Superficial
(Benjamin/Cummings, 1994) – Good broad introduction to
V. Kumar et al., Introduction to Parallel Computing.

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papers. Very useful due to comprehensive coverage.
style that makes it necessary to consult the original
(McGraw-Hill, 1993) – Good architecture book with a
K. Hwang, Advanced Computer Architectures.

of the pioneers in the field.
Banerjee, recent multithreaded work but read Wolfe before attempting.

Less comprehensive and detailed than Utgaff Banerjee's restructuring technology for shared memory machines.

Computing (Addison-Wesley, 1996) - Excellent study of

M. Wolfe, High Performance Compilers for Parallel

readable and useful.

Kaufmann, 1997) - One of many tutorials on MPI.

P. Pacheco, Parallel Programming with MPI (Morgan
structured application

survey of parallel VLSI CAD – a very irregular
Computer-Aided Design (Prentice-Hall, 1994) Good
P. Banerjee, Parallel Algorithms for VLSI