ELEC 7230 High Performance Computing Spring 2004

Instructor: S.-Y. Lee
leesooy@eng.auburn.edu  844-1848
Broun Hall 304

Class: MWF 9:00 - 9:50 a.m. Broun Hall 113

Office Hours: MW 2:00 - 3:00 p.m. (or by appointment)

Prerequisite: ELEC6230, C programming (Unix)

Ref’s: High Performance Cluster Computing, Buyya, Prentice Hall, 1999
The Grid, Foster and Kesselman, Morgan Kaufmann, 1999
Sourcebook of Parallel Computing, Dongarra, Morgan Kaufmann, 2003
Parallel I/O for High Performance Computing, May, Morgan Kaufmann, 2001
Industrial Strength Parallel Computing, Koniges, Morgan Kaufmann, 2000
Parallel Computer Architecture, Culler and Singh, Morgan Kaufmann, 1999

Grading:
Project 30 %
Paper Presentation 20 %
Midterm Exam 20 %
Final Exam 30 %

Topics:
Review
Introduction
High performance computing systems
Cluster computing
Grid computing
Data access
Programming environments
Scheduling/Load balancing
Performance analysis
Applications

For programming, refer to http://www.eng.auburn.edu/~sylee/ELEC7230.html.