CS5613 Computer Networks and Distributed Processing:  
Introduction to Parallel Processing  
SPRING 2014

Instructor: S. Lakshmivarahan,  Office: DEH - 230

Class Time: T-TH 10.30 - 11.45 AM,  Place: FH - 336

Office Hours: T-TH 9.00 to 10.00 am  
T-TH 3.00 pm to 3.30 pm

Course outline: The aim of this course is to provide a broad based introduction to the 
theory and application of parallel processing. Topics to be covered include

1) Need for parallel machines, a classification of parallel architectures
2) Interconnection Networks based on Cayley graphs of finite groups
3) Network operating system - path properties, routing, embedding in Cayley graphs
4) Performance measures for parallel algorithms
5) Parallel algorithms development - matrix related problem
6) Parallel programming using MPI

Lecture Notes: This class will be based on a set of class notes and research papers that 
will be distributed to the class.

Final Exam: Monday, May 5th, 2014 from 8.00 to 10.00 am

Grading: Assignments – 6-8; one mid-term and a final. Assignment –30%, midterm 
30%, final 40%. Grading scale: A is 90 and above, B is from 80 to 89, C is from 70 to 79, 
D is from 60 to 69 and below 59 is F.

For more information contact: varahan@ou.edu