Performance analysis of computer networks (Winter, 2006)

CRN	20212
Course Number	ECE-C632
Section Number	501
Credits	3.0
Time	Thursdays 6pm - 8:50pm
Room	Randell Hall 329
Instructor	Steven Weber
Restrictions	graduate standing
Department	Electrical and Computer Engineering

Description

Covers probability theory and its applications to networks, random variable and random processes; Markov chains, multi-dimensional Markov chains; $M/M/1$, $M/M/m$, $M/M/m/m$, $M/G/1$ and $G/G/1$ queueing systems and their applications in computer networks; analysis of networks of queues: Kleinrock Independence Approximation; Time-reversibility and Burke's theorem; Jackson's theorem; the phenomenon of long-range dependence and its implications in network design and traffic engineering.

Textbook (required)

Title	Communication Networking : An Analytical Approach
Authors	Anurag Kumar, D. Manjunath, and Joy Kuri
Publisher	Morgan Kaufmann
ISBN	0124287514
Edition	1st

Grading

Homework (one problem set per week)	20%
Midterm Exam	40%
Final Exam	40%

Homework and Makeup Exams

Makeup exams are only available if you are unable to attend due to a severe health problem or a death in your family. Homework is due at the **beginning** of class, one week following the class in which they were assigned. *Late homework will not be accepted.*

Academic Dishonesty

The Drexel University policy on academic dishonesty may be found at
`http://www.drexel.edu/cchc/studentlife/Judicial/code/dishonesty.html` and will be strictly enforced.
Plagiarism, fabrication, and cheating will, at the discretion of the instructor, constitute grounds for failure of the course.