

Performance analysis of computer networks (Winter, 2007)

CRN	20184
Course Number	ECE-C632
Section Number	501
Credits	3.0
Time	Thursdays 6pm - 8:50pm
Room	Randell Hall 323
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	1 st

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 will be strictly enforced. Plagiarism, fabrication, and cheating will, at the discretion of the instructor, constitute grounds for failure of the course.