

ESE 546: Computer Networks
Syllabus (Fall 2011)

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Goal: To introduce students to basic networking technology and common techniques of statistically analyzing networks.

Queueing Theory (Sept.-Oct.)

- (1) Continuous Time Queues
- (2) Discrete Time Queues

Network Technology (Nov.-Dec.)

- (1) Multiple Access Performance
- (2) Teletraffic Modeling
- (3) Switching Elements and Fabrics
- (4) Routing
- (5) Protocol Verification
- (6) Flow and Congestion Control
- (7) Introduction to Divisible Load Scheduling Models
- (8) Related topics as time permits

Books (at Stony Books, across from RR station and at Campus Bookstore)

T. Robertazzi, *Computer Networks and Systems: Queueing Theory and Performance Evaluation*, 3rd edition, Springer, 2000.

T. Robertazzi, *Networks and Grids: Technology and Theory*, 1st edition. Springer, 2007.

Grading:

Projects [two] (30 points), Exam 1 (25 pts), Exam 2 (25 pts), Term paper (20 pts). .

. **Note:** *If you have a physical, psychological, medical or learning disability that may impact on your ability to carry out assigned course work, I would urge you to contact the staff in the Disabled Student Services office (DSS) 631-632-6748. DSS will review your concerns and determine with you what accommodations are necessary and appropriate. All information and documentation of disability are confidential.*