TCOM 501: Data Communications and Local Area Networks  
TCOM 502: Wide Area Networks and Internet  
Sections 001 and DL1. Fall 2011.

**Instructor:** Dr. Shyam Pandula  
Office: Engineering Building, Room 3253.  
Office phone: (703)-993-7585.  
e-mail: [spandula@gmu.edu](mailto:spandula@gmu.edu)

**Time and Place** Monday 4:30 – 7:10 pm. Nguyen Engineering Building, Room 1110.

**Office Hours:** Monday/Tuesday/Wednesday 1:30- 2:30 pm. The Nguyen Engineering Building, Room 3253.

**Course Objective** is to provide an in-depth introduction to the principles of computer networking. The primary focus will be on layers 2, 3 and 4.

**Distance learning section** is offered synchronously via the web using Blackboard and live Elluminate sessions. Elluminate student instructions and guidelines for proctored tests are posted on the Blackboard.

**Textbook**  

**Course Material**  
Course slides and homework assignments will be distributed via the Blackboard course management system { [http://mymason.gmu.edu](http://mymason.gmu.edu) }. Login using your GMU email ID and password.

**Homework** will be assigned weekly and is due the following week. Late homeworks will be penalized by 20%.

**Grading**  
Homework: 20%; Midterm Exam: 35%; Final Exam: 45%.
Graduate Program in Telecommunications
George Mason University

Tentative Course Schedule

TCOM 501

- Week 1: Aug 29; Chapters 1 & 2. Introduction & Network Models: Data communications, layers in the OSI model, TCP/IP protocol suite.
- Week 2: Sept 5; **No Class. Labor day.**
- Week 4: Sept 19; Chapter 11. Data Link Control: Stop-and-wait ARQ, Go-back-N ARQ, Selective Repeat ARQ.
- Week 5: Sept 26; **TCOM 501 Midterm Exam.**
- Week 6: Oct 3; Chapter 12. Multiple Access: Random access - ALOHA, CSMA/CD, CSMA/CA; controlled access; channelization.
- Week 8: Oct 17; **TCOM 501 Final Exam.**

TCOM 502

- Week 9: Oct 24; Chapter 15. Connecting Devices and Virtual LANs.
- Week 11: Nov 7; Chapters 21 & 22. Networks Layer: Address mapping, error reporting, forwarding.
- Week 12: Nov 14; **TCOM 502 Midterm Exam.**
- Week 13: Nov 21; Chapter 22. Networks Layer: Routing protocols.
- Week 15: Dec 5; Chapter 24. Quality of Service.
- Week 16: Dec 12; **No Class. Reading day.**
- Week 17: Dec 19; **TCOM 502 Final Exam.**