Course Description
This course is an introduction to technologies and protocols used in Wide Area Networks. The course teaches the basics of the TCP/IP protocols at the foundation of the internet and covers wired and wireless communication architectures, such as Ethernet, IEEE 802.11, SONET. Students will get an understanding on how LANs and WANs are implemented in practical circumstances. Assignments using the OPNET IT Guru network simulator provide hands-on experience for network design, configuration, and performance analysis.

Instructor
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Textbook
Book URL: link

Supplementary reading material will be handed in class.

Class Time & Place
Tuesdays, 07:10PM-10:00PM
Boca Raton: FL404 (room changed from FL101)
PSL: JU112

Office Hours
Time T R  2:20-5:20PM
Boca Raton SE480, tel: 561-297-3401

Course Objectives
At the completion of this class, students will:
1. understand recent WAN and wireless technologies
2. understand how the TCP/IP protocols operate
3. comprehend mechanisms for internetworking
4. know how to apply elements of network design
5. know how to use the OPNET IT Guru simulation tool for network study and design
Course Topics
1. LAN/WAN interconnectivity
2. Physical transmission options
3. Network transmission equipment
4. LAN protocols
5. TCP/IP protocols
6. WAN transport methods
7. Wireless technologies
8. Integrating voice, video, and data
9. LAN/WAN design
10. OPNET IT Guru modeler

Blackboard:
All course material will be posted on Blackboard
http://blackboard.fau.edu

Grading Policy
One quiz at the beginning of almost each class. One homework per week.
• Homeworks: 60%
• Midterm and final exams 40%

The final grade will depend on how well the student performs relative to the rest of the class.

Assignment Submission
Homeworks are due on the date specified on Blackboard and must be submitted on Blackboard's Digital Dropbox. No assignments will be accepted after the due date.

Policy for Plagiarism
Students are required to work individually on all assignments and are expected to submit their original work. Please go to your instructor if you have any questions related to the course. Any occurrences of plagiarism will be handled according to F.A.U. policies.