

EL 6383:

High Speed Networks

1. Introduction
2. Synchronous Optical Network (SONET)
3. ATM and MPLS
4. Ethernet and Ethernet over SONET (EoS)
5. Data Center Networks
6. Packet Scheduling and Network Processors
7. Buffer Management
8. Flow and Congestion Control (TCP/IP, High-Speed TCP, XCP)
9. Routing
10. WDM Networks
11. Network Resilience
12. Reference books (you are required to buy these books)
 1. Quality of Service Control in High-Speed Networks, by H. Jonathan Chao & Xiaolei Guo, John Wiley & Sons, November 2001, ISBN: 0-471-00397-2
 2. Data and Computer Communications, William Stallings, Prentice Hall, ISBN:0132433109
 3. MPLS Fundamentals, By Luc De Ghein, Cisco Press, ISBN-10: 1-58705-197-4
13. Supplementary reading materials will be provided.
14. Instructor: Kang Xi
15. Office: LC112
16. Tel: 718-260-3504
17. Email: kxi@poly.edu
- 18.
19. Ways to reach me:
 1. Email: kxi@poly.edu

2. Using the discussion forum on the course website
 3. Call me (please email me in advance for an appointment)
 4. Stop by my office
 5. When sending me an email, please
 6. Include the course # (or it could be falsely classified as junk), and
 7. Make sure your email box is not full
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20. Homework: 0%
 21. Quiz 1: 5%
 22. Quiz 2: 5%
 23. Quiz 3: 5%
 24. Midterm: 35%
 25. Final: 40%
 26. Project: 10%
 27. Important: For fairness, no make-up tests, additional assignments or other special opportunities are available to any particular student to improve his/her grade. Please refrain from asking me for such opportunities.
 28. Homeworks are for self-evaluation
 29. No submissions required

Solutions are online for your reference

Quizzes and Exams

- See the course website for details