## Course Calendar*  Fall 2017

*NOTE: Weeks are shown Sunday through Sunday. Assignments are due the 2nd Sunday, unless otherwise noted.  
*NOTE: Subject to change based on material pace

**New Assignments in BLACK. Due Assignments in RED**

<table>
<thead>
<tr>
<th>Unit / Week</th>
<th>Topics</th>
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| **#1: 09/24 – 10/01** | - Basic concepts  
- Networking metrics  
- Network protocols  
- Network edge/core  
- Circuit-switching / Packet-switching  
Read K&R Chapter 1.1 – 1.4 |
| Lab #1 is assigned | Weekly Summary #1 assigned  
Weekly Summary #1 due |
| **#2: 10/01 – 10/08** | - Physical media  
- Layering models  
- Security issues  
- Application layer  
Read K&R Chapter 1.5 – 1.8, 2.1 |
| Lab #1 is due | Weekly Summary #2 assigned  
Weekly Summary #2 due |
| **#3: 10/08 – 10/15** | - Application layer protocols  
  - Hypertext Transfer Protocol (HTTP)  
  - File Transfer Protocol (FTP)  
  - Mail (SMTP, POP3, IMAP)  
  - Domain Name Services (DNS)  
    - Network byte order  
Read K&R Chapter 2.2 – 2.4, 2.7 (2.6 optional) |
| Lab #2 is assigned | Weekly Summary #3 assigned  
Weekly Summary #3 due |
| **#4: 10/15 – 10/22** | - Transport Layer  
- Socket programming  
- Multiplexing/Demultiplexing  
- Connectionless transport  
- Connection-oriented transport  
- User Datagram Protocol (UDP)  
- Reliable Data Transfer  
Read K&R Chapter 3.1 – 3.3 |
| Program #1 is assigned | Lab #2 is due  
Weekly Summary #4 assigned  
Weekly Summary #4 due |
| **#5: 10/22 – 10/29** | - Reliable Data Transfer  
- Transmission Control Protocol (TCP)  
- Flow control  
Read K&R Chapter 3.4 – 3.5 |
| Lab #3 is assigned | Program #1 is due  
Weekly Summary #5 assigned  
Weekly Summary #5 due |
#6: 10/29 – 11/05
Lab #3 is due

Midterm Exam

Weekly Summary #6 assigned
Weekly Summary #6 due

- Congestion control
- Fairness
- Network layer
Read K&R Chapter 3.6 – 3.8

Midterm Exam
(Available Thursday – Sunday only)

#7: 11/05 – 11/12
Lab #4 is assigned
Program #2 is assigned

Weekly Summary #7 assigned
Weekly Summary #7 due

- Virtual circuits
- Internet protocols
- Datagram routing
- Internet Protocol (IPv4)
- Classless Inter-Domain Routing (CIDR)
- Dynamic Host Configuration Protocol (DHCP)
Read K&R Chapter 4.1 – 4.3

#8: 11/12 – 11/19
Quiz #2
Lab #4 is due

Weekly Summary #8 assigned
Weekly Summary #8 due

- Routing algorithms
- Fragmentation
- Internet Control Message Protocol (ICMP)
- Network Address Translation (NAT, NAPT)
Read K&R Chapter 5.1 – 5.3, 5.6

#9: 11/19 – 11/26
Lab #5 is assigned
Program #2 is due

Weekly Summary #9 assigned
Weekly Summary #9 due

- Internet Protocol (IPv6)
- Link Layer
- Network interfaces
- Multiple Access protocols
- MAC addresses
- Address Resolution Protocol (ARP)
- Local Area Networks (LAN)
  o Ethernet
Read K&R Chapter 6.1 – 6.4, 6.7

#10: 11/26 – 12/03
Lab #5 is due

Weekly Summary #10 assigned
Weekly Summary #10 due

- Wireless networks
- Network security
Read K&R Chapter 7.1 – 7.3, 8.1 – 8.3

#11: 12/03 – 12/06
Finals Week

Final Exam
(Available Sunday – Wednesday only)