COMP 4300 – Course Details

Lecture times: 3 hours / week.

Lab times: 90 minutes / alternating weeks.

Detailed Course Outline:

1. Introduction and Overview of Applications Layer (1/2 week)
   a. Overview of the foundations and application layer
2. Connection Principles and Data Link Layer (1 week)
   a. Physical Layer and devices
3. Internetworking (3 weeks)
   a. IP networks,
   b. Switches, bridges, routers
4. Routing (2 1/2 Weeks)
   a. Routing principles and protocols
   b. Routing algorithms
5. Congestion Control (2 1/2 weeks)
   a. Resource Allocation
   b. TCP Congestion Control
   c. Congestion Avoiding Mechanisms
   d. Quality of Service
6. End-to-End Protocols and Data (2 1/2 weeks)
   a. Communication between Processes
   b. Unreliable (UDP) and Reliable (TCP) Protocols
   c. Multimedia