Network Fundamentals
Week Five
Dannelly's Sections

Basic Network Types

- **LAN** – Local Area Network
  - small area (e.g. a building)
  - small number of machines

- **WAN** – Wide Area Network
  - large area
  - usually a collection of LANS

- Textbook also includes
  - **PAN** – personal area network
  - **MAN** – metropolitan area network

Common Networking Devices

- **Ethernet**
  - the most common type of LAN
  - Advantage:
  - Disadvantage:

- **Switch**

- **Router**
Transmission Media

- Twisted-Pair
  - used in your house for the phone
  - used by a DSL Modem

- Coaxial Cable
  - used in your house for cable TV
  - used by a Cable Modem

- Radio / WiFi

- Fiber Optic

Networking your Home or Office

- **Home**
  - your phone or cable company probably supplies the modem (DSL or Cable modem, respectively)
  - you may have to buy a router
  - you configure the security settings on the router

- **Office**
  - for your LAN, you’ll probably use Ethernet
  - if you need a WAN, it may be best to set up a “Virtual Private Network”