Modulation

- <u>carrier</u> a continuously oscillating signal transmitted across a medium and used to "carry" information.
- <u>modulation</u> the process of modifying a carrier to encode information on the carrier.

Types of Modulation

- <u>amplitude modulation</u> (AM) the strength or <u>amplitude</u> of the carrier is varied according to the data.
- <u>frequency modulation</u> (FM) the <u>frequency</u> of the carrier is varied according to the data.
- phase modulation (PM) the timing or phase of the carrier is varied according to the data.

Multiplexing

- <u>multiplexing</u> the general concept of carrying multiple signals over the same medium.
- <u>frequency division multiplexing</u> (FDM) multiplexing using different carrier frequencies.
 FDM requires high bandwidth.
- <u>broadband technology</u> the term used to describe a networking technology that uses a <u>large</u> part of the electromagnetic spectrum to achieve high throughput rates.
- <u>baseband technology</u> the term used to describe a networking technology that uses a <u>small</u> part of the electromagnetic spectrum and sends only one signal at a time over the medium.

Multiplexing

- <u>spread spectrum</u> a transmission technique in which a sender and a receiver agree to use several frequencies either at the same time or by changing from one to another.
- <u>time division multiplexing</u> (TDM) multiplexing in which several senders take turns sharing a medium. Most computer networks using shared media incorporate some form of TDM.