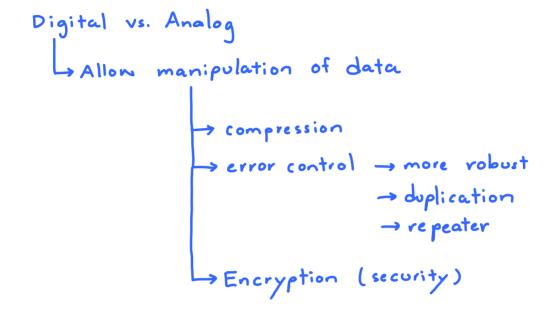
## Some extra notes from lecture 1

Monday, August 18, 2014 9:47 AM

## Aug 13, 2014





What does "modulation" mean?

so far, modulation is simply a process that shifts the frequency content of the message (to center (approximately) around some carrier frequency fc.)

Why do we need to perform modulation?

1) to transmit in the "suitable" channel freq. band

potentially required by

some governmental

organization(s)

some governmental
organization(s)

avoid "bad" freq. band

between attenuation

- 2) to have reasonable antenna size a la a 1
- 3) to allow multiple uses of the frequency spectrum by communicating in different frequency bands.

Ex. Think about multiple radio stations transmit audio signal simultaneously without interfering one another.