6.02 Fall 2014
Lecture #26

• Digital communications, end-to-end
(LTE) Cell Networks

Packet-switched core
Narrowband Access
Wideband Access with OFDM

http://www.wirelesscommunication.nl/reference/chaptr05/ofdm/ofdmmath.htm
6.02

Big themes: Reliability, sharing

Bits: Binary representation, compression (source coding), error correction (channel coding)

Signals: Noise, LTI models, frequency-domain analysis, modulation/demodulation

Packets: MAC protocols, circuit- and packet-switching, queues, routing, reliable transport

All of these components are necessarily for building the communication systems that we use today
What’s next?

• **UROP!**

• **Networks and computer systems**: 6.033 (computer systems), 6.829 (computer networks), 6.824 (distributed systems), 6.263 (analysis of networks)

• **Signal processing/digital communications**: 6.003 (signals and systems), 6.011 (communications, control, and signal processing)

• **Communication and information theory**: 6.450 and 6.451 (digital communications), 6.441 (information theory)

• **Security**: 6.857 (computer and network security), 6.858 (computer systems security)