

# CS530

# Wireless Technologies & Implications

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## What's Different About Wireless



**Easy (but wrong) answer:**

- = wireless communication involves transmission of data by radio or similar means, and this allows an attacker to read the data more readily without requiring physical access to the network**



**The problem with this explanation:**

- = if you have been paying attention during this course, you will likely note that we have been assuming it is easy for an attacker to intercept data anyway, even on wired networks**
- = good security design should assume this**
- = yes, it is a little easier for an attacker to eavesdrop with wireless, but there are so many other ways to get the data that wireless doesn't really change this part**

## What's Different About Wireless (Cont...)



The real answer:

- = wireless communications devices are often disconnected
  - sometimes it is harder to solve security problems if you do not have access to the network (e.g., to reach KDC, DS)
- = such devices may have limited storage or limited computation abilities
- = such systems may be more vulnerable to jamming
  - but on the other hand, it's harder to "cut the line"
- = such systems create a less accountable path into the network
  - can trace back TCP connections
  - but it can be hard to determine last hop for wireless (MAC address can be spoofed in 802.11)