

CSCD433/533 Advanced Networking
Assignment 3
Due: Feb. 13th, 2017

Answer the Questions Relating to Wireless LAN's. If you use references, please list them along with the URL.

1. In general, what physical characteristics in terms of modulation techniques, number of channels and anything else that is appropriate have allowed 802.11 to increase its speed and efficiency?
2. In particular, what is so great about the new proposed 802.11ac standard?
Are there any drawbacks to switching from 802.11g or n to 802.11ac?
3. Which applications require throughput levels not easily supported by legacy Wi-Fi networks?
4. Wireless networks have more issues with security since the data is sent over the “air”.
Outline the security measures that are typically implemented in wireless networks these days.
5. Explain why the range for 802.11a is typically less than for 802.11g.
6. Say, you are on a large campus, bigger than EWU, and you are walking between classes with your laptop computer on and connected to the wireless campus network. This network is configured with multiple wireless Access Points in an ESSID. Describe what happens as your laptop connects and reconnects to each of the ESSID Access points assuming your signal strength waxes and wanes as you move away and get closer. Feel free to draw a diagram of the campus and Access Points.

See some links that are on our Relevant Links class page (see our class homepage), have some good technical articles and tools for wireless.

Here are a couple that should help you answer these questions:

Lisa Phifer's site, <http://www.corecom.com/html/wlan.html>

Raul Sile's site, <http://www.raulsiles.com/old/index.html>