EEL 6591: Wireless Networks
Spring 2017

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Prerequisites: EEL 5718: Computer Communications.


Topics include:

1. Overview of wireless communication networks and protocols
2. The cellular concept: system design fundamentals
3. Wireless physical layer fundamentals
4. Data link control protocols
5. Wireless medium access control (MAC) protocols
6. Radio resource management (power control)
7. Resource allocation and Call admission control
8. Mobility management
9. Wireless networking (routing/rerouting, wireless TCP/IP)
10. Revolution/evolution towards future generation wireless networks (4G/5G/LTE-U)
11. Selected topics: wireless mesh networks, mobile ad hoc networks, wireless sensor networks, RFID, Vehicle Networks, Internet of Things (IoT), cognitive radio networks
12. Wireless security (if time allows)

Grading: Homework-10%, Two exams-70%, and Project-20%. Project: project description is given on the webpage http://www.fang.ece.ufl.edu/eel6591/project.html.
Academic honesty statement: All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a student at the University of Florida and to be honest in all work submitted and exams taken in this class and all others.