CSE 5345-002 Fundamentals of Wireless Networks
Fall 2016

Instructor: Dr. Sajib Datta, ERB 652
Office Hours: MoWe 2:30PM - 4:00PM or by appointment
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Class hours: Sections 001: MoWe 4:00PM - 5:20PM – ERB 129
Teaching Assistant: TBA

Course Description from Catalog:
Fundamentals of wireless networks, including wireless channels, coding and modulation, cellular architectures and protocols, multiple division techniques, multiple access control, wireless LAN/PAN, mobile IP and wireless internet, TCP over wireless, ad-hoc networks, sensor networks. Prerequisite: CSE 4344/CSE 5344 or equivalent course.

Course Objectives:
Wireless networks are untethering every bit of our life, mostly centered on smart devices deeply penetrating into our daily lives. This course aims at providing the students with a SYSTEMATIC knowledge of wireless networks, including physical layer techniques (signal propagation, coding, modulation, and error control), link layer, network layer, transport layer, and applications. We will cover recent wireless technologies including 4G/5G cellular networks, NFC, BLE, UWB technologies.

Textbook:
Wireless Communication and Networks (second edition) By William Stallings

Attendance Policy:
Attendance is not required.

Grading Policy:
Quiz: 50%
Technical Paper presentation: 10%
Programing Projects/Lab: 40%
Final grades are based on the standard ranges of A: 90–100, B: 80–89, C: 70–79, D: 60–69, F: 0–59.

Technical Paper presentation: Paper presentation must be group effort. Each group will have 3 persons.
**Project:** Project has a given due date. No late project will be accepted without prior permission from the course instructor. Project must be **team** effort. Each team will have 3 persons. The Statement of Ethics you will receive details the definitions of collusion, plagiarism, and academic dishonesty as related to lab assignments in CSE.

**Quiz:** Material covered on the quiz will be based on the class lectures. The quiz is mandatory. There is NO make-up quiz after the scheduled time. Quiz will be kept by the instructor.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student’s responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance.

**American with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the Americans with Disabilities Act (ADA). All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

**Electronic Communication Policy:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly.

**Academic Integrity:** At UT Arlington, academic dishonesty is completely unacceptable and will not be tolerated in any form, including (but not limited to) cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts (UT System Regents Rule 50101, 2.2). Suspected violations of academic integrity standards will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the students’ suspension or expulsion from the University. Homework assignments are not group projects; each student is expected to write his or her own programs individually. Students should not be showing each other their code prior to the deadline for submission.

**Student Support Services:** UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded
programs. For individualized referrals, students may contact the Maverick Resource Hotline by calling 817-272-6107, sending a message to resources@uta.edu, or visiting www.uta.edu/resources.

**Student Feedback Survey:** At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory will be asked to complete an online Student Feedback Survey (SFS) about the course and how it was taught. Instructions on how to access the SFS system will be sent directly to students through MavMail approximately 10 days before the end of the term. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback data is required by state law; student participation in the SFS program is voluntary.