CS5530 Mobile/Wireless Systems

Spring 2017, Credit Hrs: 3, CS Dept/College of EAS

Instructor: Dr. Yanyan Zhuang
Office: ENGR 184
Time: M/W 4:45pm-6:00pm
Classroom: ENGR 138

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Course Description

This course introduces the fundamentals of the protocols, design and applications in mobile and wireless networks. Additionally, the course also introduces the creation of mobile applications, OS, programming, security, and their interactions with web systems, wireless systems, and cloud computing. By taking this course, you will learn how mobile systems work, gain a good understanding of networks like WiFi, cellular, Bluetooth networks, and learn about these systems' design principles. Topics include:

- Wireless transmissions and media;
- Wireless protocols such as 802.11;
- Web programming support for mobile apps;
- iOS and Android mobile development;
- Wireless sensor network, mesh network, etc.

Prerequisites

• CS5220 or instructor permission.

Reference Books

This course does not have a required textbook. However, the material presented in this course will be complemented by this reference book:

Andrew S. Tanenbaum, David J. Wetherall, Computer Networks, 5th Edition, Prentice Hall.

Grading

Grading Scale

- A: [90, 100], A-: [87, 89]
- B+: [84, 86], B: [80, 83]
- C+: [75, 79], C: [70, 74]
- D+: [65, 69], D: [60, 64]
- E/F: below 60

Distribution of Points

• Assignments: 40%

• Midterm exam: 20%

• Final exam: 20%

• Research project: 20%

Assignments and information about project will be posted on course website. Midterm will be around mid to late March. You may also find the final exam schedule at this URL:

Course Policy

- The last day to withdraw with a tuition refund is Wed, 2/1/2017.
- If you have a disability for which you are requesting an accommodation, you are encouraged to contact the Disability Services Office within the first week of classes. The Disability Services Office is located in Main Hall #105 (Phone number: 255-3354).
- Students are expected to attend all lectures. However, each student is allowed one absence. For each extra absence, the attendance percentage is reduced proportionally.
- Late submission of homework and project assignments will incur a 25% penalty on grading for each day after the deadline.
- Under extreme non-academic circumstances, such as illness, exceptions can be made in above attendance, submission, and exam policies. You have to provide sufficient and convincing proof, e.g., documents from the doctors.
- Adherence to the University's Code of Ethics will be strictly monitored and enforced. This will be applicable to assignments, projects, and exams. Academic Integrity violations, such as plagiarism, cheating on an exam etc., will result in a series of actions and penalties, including failing the class.
- Any work submitted for a grade must include the following statement and be signed and dated. If this is missing or not signed and dated, the work will be returned ungraded.

I have neither given nor received unauthorized assistance on this work.

Signed: Date: