Course Syllabus

Ve689

Wireless Networks

Fall 2018-2019

Course Description:

In the first part of the course, you will learn fundamentals in wireless networks ranging from physical layer to application layer for different wireless networks, e.g., wireless local area networks, wireless personal networks, cellular networks. In the second part of the course, we will discuss research challenges and state-of-art approaches in different detail research topics. Through class lectures, paper reading, and presentation, you will gain a broad understanding of the current technology and research efforts in wireless networking, as well as further developing skill for oral presentation and writing research critiques. In addition, students are expected to accomplish a well-defined research project by yourself or in pairs to obtain experience in designing and evaluating protocols and/or techniques for wireless networks.

Instructor:

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Phone: 34206045-2273
Office: Room 227
Office hour: by appointment

Textbook (Author, Book Title, Publisher, Publication Year, ISBN):

Required Texts & Materials:
No textbooks, but need reading papers in top journals and conferences.

Suggested Texts, Readings, & Materials:
Cory Beard and William Stallings, "Wireless Communication Networks and Systems", Pearson, first edition, 2015
Read industrial standards and specifications.

Course Prerequisites:

Computer Communication Networks, Digital Communications, Wireless Communications

Course Website:

N/A

Grading Policy (Assignments %, Project, Exams, etc.):

Attendance: 10%

Presentation: (3 times) 30%

Creative Research: 30%

Final Exam/Report: 30%

Honor Code Policy:

1. Students are required to seriously obey the honor code as regulated by UM-SJTU Joint Institute and SJTU. Violation of the honor code will be reported to the honor council.

2. Students must carefully follow JI' exam room regulations.

3. All registered students are required to attend each class. Absence from class must be approved by the instructor. Students must arrive on time and are not allowed to leave during class unless it is approved by the instructor. Absence from classes for more than twice will trigger deduction of final grade (1 point per class).

4. All homework assignments must be submitted on time. Homework must be completed by a student independently, although discussion and collaborations are allowed. Copying homework is a violation of the honor code.

5. Cell phones must be off in class. No web browsing is allowed unless it is advised to do so by the instructor. No food is allowed in class, but is allowed during break time.

6. Individual course project must be completed independently. The project report must clearly identify the existing work and students' own contribution. A demo is usually required for the course project.

7. Posting slides of this course to any websites is prohibited. Students are not allowed to distribute slides to other students, unless it is approved by the instructor.