SYLLABUS--GENERAL INFORMATION

Course:
EECS 316/414: Wireless Communications, Credits: 3
Meeting time: 5:30PM – 6:45PM TR
Meeting Location: White 324
Lab: Sears 315

Instructor:
Dr. Pan Li
Office: Olin 612
Email: lipan@case.edu
Phone: 216-368-0382
Office Hours: by appointment

TA:
Sheng Mu (mxs2090@case.edu)

Prerequisite:
Grade of C or better in EECS 351 (Communications and Signal Analysis) for undergraduate students.

Textbook:
Theodore S. Rappaport, Wireless Communications: Principle and Practice, Second Edition, Prentice-Hall, 2002. ISBN-10: 0130422320. ISBN-13: 978-0130422323.

References:
1. Principles of Wireless Networks: A Unified Approach by K. Pahlavan and P. Krishnamurthy, Prentice-Hall, 2002.
2. Wireless and Mobile Network Architecture by Yi-Bing Lin and Imrich Chlamtac, John Wiley & Sons, 2000.
3. Technical papers.

Course Topics:
- Overview of wireless communication networks and protocols
- The cellular concept: system design fundamentals
- Brief introduction to wireless physical layer fundamentals
- Multiple access control protocols for wireless systems
- Wireless networking (routing/rerouting, wireless TCP/IP)
- Mobility management
- Call admission control and resource allocation
- Revolution/evolution towards future generation wireless networks
- Overview of wireless mesh networks, mobile ad hoc networks and wireless sensor networks
- Wireless security (optional)

Online Material:
A significant amount of course-related material may be found at the class website. It is the responsibility of the student to be cognizant of this information; thus, the student should visit the

website frequently. Additionally, important class announcements will be sent by email to the official class email list. This list sends mail to university Official Student Email addresses. It is the responsibility of the student to configure his or her Official Student Email appropriately (including any desired forwarding to other addresses), and to read email frequently.

SYLLABUS--CLASS POLICY

Expectations:
The instructor expects the student to:

- Attend each class!
- Read the course materials!
- Work all the homework and the project!

Honor Code:
All students in this course are expected to adhere to University standards of academic integrity. Cheating, plagiarism, misrepresentation, and other forms of academic dishonesty will not be tolerated. This includes, but is not limited to, consulting with another person during an exam, turning in written work that was prepared by someone other than you, making minor modifications to the work of someone else and turning it in as your own, or engaging in misrepresentation in seeking a postponement or extension. Ignorance will not be accepted as an excuse. If you are not sure whether something you plan to submit would be considered either cheating or plagiarism, it is your responsibility to ask for clarification.

Attendance:

- A student is considered present for class if the student remains in class for the duration of the class.
- If an absence from class is unavoidable due to some situation beyond a student's control, the student should advise the instructor before a class is missed.
- Although attendance is not a formal component of the course grade, attendance records will be reported along with course grades.

Homework:

- Homework will be assigned each Thursday and will be due the following Thursday, unless otherwise specified.
- Homework must be turned in at the beginning of the class period in which it is due.
- No late homeworks will be accepted for any reason.

Exams:

- All exams will be closed book and closed notes, unless otherwise specified.
- Students are expected to be present for all exams. Make-up exams due to an absence will be given only under the following conditions:
    - The student has informed the instructor of the absence at least 24 hours in advance of missing the exam.
    - --OR--
    - The student misses the exam due to some situation beyond the student's control (such as a serious illness, a death in the family, etc.) which is unexpected, unavoidable, and documented. The reason for each absence of this sort will be

judged case by case by the instructor and, if it is deemed valid under the above description, a make-up exam will be given.

- After a graded exam has been returned to a student, the student may wish to dispute the exam score:
    - In the case of an arithmetic error in the tallying of the exam score from the individual sections of the exam, the error will be corrected.
    - In all other cases, the student may request that the exam be regraded. During exam regrading, the entire exam will be regraded, which may result in higher or lower scores on each and every section of the exam. Thus, if you submit your exam for regrading simply to “quibble" about a few points you “unjustly lost" on a certain exam problem, you should be aware of the possibility that you may lose any points which you had “unjustly gained" through oversight on other problems.
    - In all cases, all requests for exam regrading must be made within one week following the date the graded exam was returned to the student.
    - An exam will be regraded only once.

Grading:
Final course grades will be based on homework and exams with weighting as described below.

For ECSE 316 students:
Homework Assignments. 10%
Lab 30%
Midterm Exam 30%
Final Exam 30%

For ECSE 414 students:
Homework Assignments. 10%
Lab 15%
Course Project 15%
Midterm Exam 30%
Final Exam 30%