EE 567 - COMMUNICATION SYSTEMS

Fall 2010

Course Syllabus

Instructor: Prof. Michael A. Enright
PHE 414, (213) 740-7654
E-mail: enright@usc.edu
Office Hours: MW 4:00–5:00 (For homework-related problems, please go directly to the TA.)

Lecture: MW 5:00–6:20, OHE 136

Website: http://den.usc.edu

TA: Omer Faruk Yilmaz
EEB 533, (213) 740-4666
Email: oyilmaz@usc.edu
Office Hours: Tue 2:00-4:00

Textbook: Modern Digital and Analog Communication Systems, 4th Edition, B. P. Lahti and Z. Ding, Oxford University Press, 2009

Reference Book: [1] 3G Evolution: HSPA and LTE for Mobile Broadband, 2007

Homework: There will be homework and project(s). This class will be heavily simulation intensive require computer programming in C or Matlab. No late homework will be accepted.

This is a graduate level course; neither the TA nor grader is responsible to help you debug.

Exams: Midterm: October 20 (Wednesday), 5:00-6:20 (in class)
Final: December 8 (Wednesday) 4:30-6:30

Grading Policy:

1. Homework: 10%
2. Projects: 20%
3. Midterm: 30%
4. Final Exam: 40%

Tentative Schedule:

Topic 1: Random Processes in Communications Systems
Topic 2: Fundamentals of Waveform Communication
Topic 3: Analog Communication
Topic 4: Digital Communication and Multiple Access
Topic 5: Optimum Receiver, OFDM, and Multipath
Topic 6: RF Communication Design and Analysis
Topic 7: Modern Communication Systems – DTV/WCDMA/WiMAX/GPS

Other Items:

1. Communication engineering is extremely complicated and challenging both in academia and industry. This class (and field) requires a significant commitment. The workload for the class will be heavy and the concepts are difficult.
2. *Cheating will not be tolerated in this class!* The TA and grader WILL monitor all work to ensure academic integrity. In the event that cheating occurs, a grade of 0 will be awarded for the first offense. The second offense will be reported to the University for further disciplinary action. If you let someone copy your work, you are also guilty and will suffer the same consequences.
3. The TA is not responsible for answering questions, via email or otherwise, outside of his office hours. I have instructed him to limit access. Questions should be asked during class or the discussion session on Friday.
4. The median score for the class corresponds to a *B letter grade*.
5. Matlab/C/C++ is an important aspect of this class and communication engineering in general. You are encouraged to work through the exercises in the textbook.
6. Matlab toolboxes are not allowed unless stated by the professor.
7. The TA may verify your code at the end of the semester.
8. The grading policy and schedule are subject to change.

Statement for Students with Disabilities:
Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

Statement on Academic Integrity:
USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. Scampus, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A:http://www.usc.edu/dept/publications/SCAMPUS/gov/. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: http://www.usc.edu/student-affairs/SJACS/.

Fax (213) 821-2367
Email: berti@usc.edu

Important Reminder:
Please refer to the following web sites for USC policy on academic integrity and the penalties for cheating and plagiarism. **These rules will be strictly followed.**

1. http://www.usc.edu/dept/publications/SCAMPUS/gov/gov05.html
2. http://www.usc.edu/dept/publications/SCAMPUS/gov/gov11.html
3. http://www.usc.edu/dept/publications/SCAMPUS/gov/gov12.html
4. http://www.usc.edu/dept/ARR/grades/