EE 163a – Communication Theory I, Winter 2012

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Class webpage:
https://courses.caltech.edu/course/view.php?id=878

Textbook:
Digital Communications 5th Edition, by John G. Proakis and Masoud Salehi. McGraw-Hill

Syllabus:
Bandpass signals, random processes
Signal space representations
Digital modulation schemes
Optimum receivers for AWGN channels
Detection in the presence of uncertainty
Signaling schemes with memory
Power spectrum of digitally modulated signals
Carrier and symbol synchronization
Communication over bandlimited channels

Homework :
There will be 5 homework assignments. You can collaborate with other current EE 163a students in solving homework problems. However, your submitted solution must be written without referring to any shared material such as discussion notes. You may not use any problem solutions from the web or from previous years' or other course material. You may refer to other general resources such as articles or papers on the web, textbooks, or other course notes.

Grading:
Credit is weighted as follows:

Homeworks   70 %
Take-Home Final   30 %

Late policy:
Assignments submitted after the due date are subject to late penalties.

Up to 1 working day late: 10% penalty
Up to 3 working days late: 20% penalty
Up to 5 working days late: 40% penalty
No credit will be given to assignments that are submitted more than 5 working days late.