Communication Theory I
EE163A Winter 2009
http://ee163.caltech.edu
Monday and Wednesday 9:00am-10:25am 070 MRE

Instructor
Kevin Quirk
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Room: TBD
Office Hours: After class or by appointment.

Teaching Assistant
TBD
email: TBD
Office Hours: TBD.

Prerequisites
EE 111 (Signals, Systems, and Transforms)
ACM/EE 116 (Stochastic Processes and Modeling)

Reference Textbook
Digital Communications 4th Edition
John G. Proakis

Course Contents
thermal noise, detection in Gaussian noise, complex baseband signal and noise representations, coherent binary detectors, non-coherent binary detectors, quadrature multiplexing, M-ary systems, spectral occupancy, continuous phase modulation, band-limited channels, inter-symbol interference, Nyquist pulse shaping.

Grading
The exams will be take-home with a strict time limit; no collaboration of any kind is allowed on the exams.
Midterm Exam: 40%
Final Exam: 60%

Academic Integrity
All violations of the honor code will result in a failure of the course and will be turned over for further sanctions.