EE 163a – Communication Theory I, Winter 2012

Instructor: Tracey Ho  
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Office: Annenberg 302

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

Textbook:  

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:  

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homeworks</td>
<td>70 %</td>
</tr>
<tr>
<td>Take-Home Final</td>
<td>30 %</td>
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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.