IEOR E4709 Syllabus

Course Objective:
This course covers basic statistics and time series and their applications to financial data.

Prerequisites:
Probability and statistics at the level of IEOR E4150, and stochastic processes at the level of IEOR E4106

Recommended Books:

Time and Venue:
Time: Tuesday and Thursday 4:10pm--5:25pm
Room: Mudd 833

Regular Class Cancelation:
Jan 20, 2015
Jan 27, 2015

Make-up Classes:
8:40am--9:55am, Feb 4, 2015 (Wednesday), 702 Halmilton

Office Hours:
11am--12pm Tuesday and Thursday in 801C Schapiro CEPSR

TA Info:
Shuangyu Wang
Email: sw2756@columbia.edu
Office hours: 4pm--6pm, Wednesday, 301 Mudd

CA Info:
Jinshu Niu
Email: jn2499@columbia.edu

Midterm:
Time: 4:10pm--6:55pm on Mar. 10 (Tuesday)
Room: TBA

Outline (subject to change):
<table>
<thead>
<tr>
<th>Estimation</th>
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<tbody>
<tr>
<td>Hypothesis Testing</td>
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<tr>
<td>Bayesian Statistics</td>
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<tr>
<td>Black-Litterman Model</td>
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<td>Regression Analysis</td>
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<td>Principal Component Analysis</td>
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_ Linear Time Series
_ Volatility Models
_ High Frequency Data

**Evaluation:**
_ Homework assignments: 10 homework sets; 1% each
_ Final exam: 50%
_ Midterm exam: 40%