**Advance Telecommunications Finance, TLEN 5839, fall 2004**

Preliminary, will change as class develops
CLASS ROOM Engineering ECCS 1B14

[Link to WebCT](#) (password required)

**printer friendly version of Syllabus**

**Lectures**

**Week 1**, 26 August; **Week 2**, 2 September; **Week 3**, 9 September; **Week 4**, 16 September; **Week 5**, 23 September; 30 September (Fall Break, no class); **Week 6**, 7 October; **Week 7**, 14 October; **Week 8**, 21 October; **Week 9**, 28 October; **Week 10**, 4 November; **Week 11**, 11 November; **Week 12**, 18 November; **Week 13**, 23 November (Note: This class is Tuesday of Thanksgiving break week); **Week 14**, 2 December; **Week 15**, 9 December; Final, xx December

**Administrative**

Instructor, e-mail instructor
Mid-term exam
Grader, e-mail grader
Texts
Grading policy
Mid-term exam, Final exam

<table>
<thead>
<tr>
<th>Date/Week</th>
<th>Topic(s)</th>
<th>Reading Assignment</th>
<th>Homework</th>
<th>HW Due Date (In class)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Before class begins</strong></td>
<td>Review (on your own) Time Value of Money Financial Statements Pro forma Financial Statements See Financial Prerequisites</td>
<td>Review of Finance: any financial text on the topics: B&amp;M is a good text, see chapters 3, &amp; 4</td>
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<td>26 August</td>
<td><strong>For class:</strong> Administration Financial Statements Asset Valuation</td>
<td>Principles of Asset Valuation, B&amp;M Chapter 7 Valuation of Common Stock, B&amp;M Chapter 9</td>
<td>HW 1: B&amp;M Chapter 7: 1, 9, &amp; 12. B&amp;M Chapter 9: 1, 3, 4, &amp; 7. Solutions: HW 1 Spreadsheet: B&amp;M Chapter 7; B&amp;M Chapter 9</td>
<td>2 September</td>
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<tr>
<td>Date</td>
<td>Week</td>
<td>Topic</td>
<td>Reading References</td>
<td>Homework</td>
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<td>16 September</td>
<td>4</td>
<td>Forward &amp; Future Markets/Prices</td>
<td>Overview, Hull 1 Futures Markets, Hull 2 Future Prices, Hull 3</td>
<td>HW 4 Hull Chapter 1: 1.7, 1.12, 1.19, &amp; 1.27 Hull Chapter 2: 2.1, 2.5, 2.19, &amp; 2.25 Hull Chapter 3: 3.1, 3.4, 3.12, 3.22, &amp; 3.28. Solutions: HW 4</td>
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<td>23 September</td>
<td>5</td>
<td>Hedging (more) Options Introduction</td>
<td>Hedging, Hull 4 Mechanics of Options, Hull 7</td>
<td>HW 5 Hull Chapter 4: 4.6, 4.11, 4.16, &amp; 4.20 Hull Chapter 7: 7.3, 7.11, &amp; 7.14 Solutions: HW 5</td>
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<td>30 September</td>
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<td>FALL BREAK, NO CLASS</td>
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<td>21 October</td>
<td>8</td>
<td>Black-Scholes Model</td>
<td>Black Scholes Model, Hull 12 The Pricing of Options, Black Scholes Computational Finance (full paper), Forsyth</td>
<td>HW 8: Hull Chapter 12: 12.1, 12.4, 12.5, 12.6, 12.12, 12.14, &amp; 12.18. Solutions: HW 8</td>
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<td>Date</td>
<td>Day</td>
<td>Topic</td>
<td>Notes</td>
<td>Date</td>
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<td>28 October</td>
<td>9</td>
<td>Review</td>
<td>Midterm exam</td>
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<td>4 November</td>
<td>10</td>
<td>Real Options: An Introduction</td>
<td>A&amp;K, Chapters 1-6&lt;br&gt;A&amp;K, chapters 5 &amp; 6 summary&lt;br&gt;A&amp;K, chapters 5 &amp; 6 slides&lt;br&gt;A&amp;K, chapter 5 slides</td>
<td>11 November</td>
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<td>11 November</td>
<td>11</td>
<td>Real Options: An Introduction (continued)</td>
<td>A New View of Telecommunications Economics&lt;br&gt;Real Options: Overview&lt;br&gt;Real Options: Review&lt;br&gt;LT, Chapters 1-2&lt;br&gt;Trigeorgis, &quot;Real Options: A Primer&quot;</td>
<td>18 November</td>
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<td>18 November</td>
<td>12</td>
<td>Real Options</td>
<td>LT, Chapters 3-4&lt;br&gt;Get Real, Mauboussin Contingency Claims, B&amp;M: 17&lt;br&gt;Making Real Options Real, Copeland&lt;br&gt;Real Options, Hull 28</td>
<td>23 November</td>
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<td>23 November</td>
<td>13</td>
<td>CLASS ON TUESDAY, 23 NOVEMBER BEFORE THANKSGIVING BREAK&lt;br&gt;Real Options: Calculations &amp; Applications</td>
<td>LT, Chapters 5-6&lt;br&gt;A&amp;K, Chapters 7-9&lt;br&gt;A&amp;K, Chapters 10-12&lt;br&gt;Real Options Valuations, Herath</td>
<td>2 December</td>
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<td>9 December</td>
<td>15</td>
<td>Review</td>
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Midterm: 28 October 2004, ECCR 244 (second floor computer room, Northwest corner)
Final Exam: 7:30 AM – 10:00 AM, 14 December 2004

Key: A&K = Amram, & Kulatilaka; A&N = Alleman & Noam, B&M = Bodie & Merton, B = Benninga, D&P = Dixit & Pindyck, H = Hull, T - Trigeorgis

Texts:


Optional:


Reading for Fun:
A Review of Against the Gods

A Review of Capital Ideas

Administrative
The class will meet once a week.
Topics/papers discussed by students will be associated with sections
Class will be supplied with a list of 4 areas for their papers
The class will consist of lectures followed and student presentation. A few minutes will be reserved at the end of class for questions.
Presentation will be made available at the end of the student presentation for other students to read before the next class.
At the start of the next lecture/class period, there will be a discussion of the paper from the previous class.
Topics for student papers will also be associated with sections of class outline.
A student in lieu of a paper will be responsible for taking notes and compiling the notes for the instructors.
Homework Grading Policy

In-class & CAETE
One assignment per week and individual homework. Late penalty will be one tenth (1/10) of your total score; each homework total score is 100 points. Your assignment is due at the beginning of class on the due date. Copying homework/exam from friend(s) or any other materials is considered cheating. Penalty to all who are cheating will be zero score for that homework and/or exam. Please make sure to include your name, student identification, and Chapter and problem numbers in upper right corner of each page and that all pages are stapled together. (No paper clips, please):

Please show all your work in order to get full credit. If submitted incorrectly, 5% will be removed from points on your assignments. Answer sheets will be provided with graded homework.

Grading: Homework = 40%, Exams = 40%, Class discussion = 20%

Class meets at 2:00 - 4:45, Thursday, Engineering ECCS1B14

CAETE
You may only send your homework by U.S. mail, by fax or e-mail to Mr. Sushant Jadhav. No other way is accepted. Your assignments are due one week after the in-class assignments are due. If you mail it, make sure you staple it and follow above instruction. (Your name, course number and Chapter number and problem number). Faxes, obviously will not arrive stapled, but again follow the above instructions. If you e-mail it, ensure that the spreadsheet can be printed easily (ensure that a single problem does not cover two or three pages.)

The address is:
Interdisciplinary Telecommunication Program
Mr. Sushant Jadhav, TLEN 5839
Campus Box 530
Boulder, CO 80309-0530
The fax number is (303) 492-1112

WebCT NOTICE
E-mail list
Class E-mail list is tlen-5839-f04@lists.colorado.edu
To subscribe, send a message to:
Listproc@lists.colorado.edu
With body of message being:
Subscribe tlen-5839-f04 your first and last name.

Instructor: Professor James Alleman
Office: Engineering OT 343
Office Hours: 12:30 - 2:30, Tuesday & Thursday
Phone: 303 735-6008
Facsimile: 303 492 -1112
E-mail: James.Alleman@Colorado.edu

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