Options, Futures, and Other Derivatives

By John Hull
Prentice Hall

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6th Edition

My Dozen Objectives
1. Distribute a written syllabus the first day of class
2. Demonstrate my ability to organize materials for the class
3. Stimulate interest in the topic being studied
4. Generate effective class discussion when appropriate
5. Communicate effectively and speak clearly
6. Encourage independent thinking and ethical behavior
7. Demonstrate openness to students’ comments, questions, and viewpoints
8. Display an exceptional understanding of the course subject matter
9. Keep to the time and schedule requirements of the class
10. Provide students access to me outside of class and be available for Q&A
11. Clearly communicate course requirements and assignments
12. Promptly grade exams

Expected Course Outcomes
Students completing this course will:
1. Understand key RISK MANAGEMENT concepts, terms, and definitions
2. Develop an understanding of how fundamental concepts and theories are applied
3. Comprehend the importance of options, futures, and commodities
4. Attain a practical understanding of different types of derivatives
5. Appreciate cultural diversity and respect others who are of a different culture

My Goal
My goal is for students to LEARN! It is all about you!

Options & Futures: Bus 70.4 Website http://userhome.brooklyn.cuny.edu/bassell/
Back up site http://mibusu.com/brooklyn/
My Goals For You
1. Increase Your general knowledge about the subject
2. Enhance Your ability to analyze and solve problems
3. Improve Your ability to use computers and the Internet
4. Expand Your ability to find and use information on your own
5. Develop Your ability to express your ideas
6. Fortify Your appreciation and sensitivity to ethical issues
7. Enrich Your understanding of different cultures and have you become a champion of cultural diversity

My Mission
To help students achieve their educational and professional goals.

Course Overview
The focus of Bus 70.4 is on providing a sophisticated overview of the issues and dilemmas facing risk managers. Derivatives (options and futures) are presented as a tool for managers to minimize risk.

Methodology: The text book is required and an important tool used to expose students to important risk management concepts and topics. The application of key risk management concepts will be explored and students will be required to analyze case studies. The classroom experience is designed to reinforce key concepts from the text book and introduce new concepts. Discussion, lecture, powerpoint presentations, and video segments about the application of the concepts will be used to help students develop a mastery in the subject matter. We will review Business Snapshots for important concepts.

Options & Futures: Bus 70.4 Website  http://userhome.brooklyn.cuny.edu/bassell/
Back up site  http://mibusa.com/brooklyn/
3 Mini Projects
This course will require students to complete 3 mini projects in an effort to
- Strengthen your critical reading, listening, and reasoning skills
- Develop your internet research, analytic, and quantitative skills
- Enhance your ability to interpret data and solve problems

The due dates are as follows:
- 1st Part March 12th
- 2nd Part April 16th
- 3rd Part May 7th

- Attendance
Class meetings are for your benefit! Regular attendance is required. Excessive absence (more than 3) or lateness (more than 6) will result in a penalty of one full grade lower. Absence for religious observance is allowed as outline in the Student Handbook.

Students should come to class prepared to participate and take really good notes!!!

There will be information shared in class that is NOT in the book. You are responsible to know this material for the exams and quizzes. It is against department policy to give makeup exams.

**** There are NO makeup Exams****

- Reading Assignments
Please read the chapters, cases, and other materials BEFORE class. The chapters next to the date are the chapters we will discuss in that class.

- Talking In Class
Talking in class is allowed. HOWEVER, only one person is allowed to speak at a time. I expect that you show respect for students who have opinions different from your own. Also please be patient with students who have questions and are trying to understand concepts. Talking in class and being rude will certainly have a negative impact your grade.

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Back up site  http://mibusa.com/brooklyn/
Exams (2)

There will be 2 Exams **** There are NO makeup Exams****

<table>
<thead>
<tr>
<th>Exam #</th>
<th>Date of Exam</th>
<th>Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Midterm</td>
<td>March 19th</td>
</tr>
<tr>
<td>2</td>
<td>Final</td>
<td>Cumulative</td>
</tr>
</tbody>
</table>

- You are required to take both exams. There are NO makeup exams allowed by the department. PLEASE do not cheat or violate the code of conduct! It is not worth getting an F or being suspended from the university.
- EXTRA CREDIT: There are no EXTRA Credit assignments. Any student wanting to earn HONORS credit will need to have their project approved by me.

Your exams and projects will be graded diligently. There is NO curve in grading exams. If your average is a 59 you earned an F. There are NO extra credit assignments. A rigorous process will be used to determine your final grade. If you get an A you should get satisfaction from knowing that you worked hard and earned that grade.

Exam Types

=The Final is **Cumulative**

The date of the first Exam is posted in the Reading Schedule
It will include multiple choice, fill-in, matching, short essay etc.

Grading

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Factors impacting your grade:</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
<td>Cheating</td>
</tr>
<tr>
<td>5%</td>
<td>Infrequent attendance</td>
</tr>
<tr>
<td>5%</td>
<td>Rude or disruptive behavior</td>
</tr>
<tr>
<td>5%</td>
<td>Signing the attendance sheet and leaving</td>
</tr>
<tr>
<td>25%</td>
<td>Signing attendance sheet for someone else</td>
</tr>
<tr>
<td>10%</td>
<td>Failure to turn off electronic devices (cell phones, pagers etc)</td>
</tr>
</tbody>
</table>

Options & Futures: Bus 70.4 Website http://userhome.brooklyn.cuny.edu/bassell/ 
Back up site http://mibusa.com/brooklyn/
Grading Criteria

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage Range</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>92.5% +</td>
</tr>
<tr>
<td>A-</td>
<td>90.0% to 92.49%</td>
</tr>
<tr>
<td>B+</td>
<td>87.5% to 89.99%</td>
</tr>
<tr>
<td>B</td>
<td>82.5% to 87.49%</td>
</tr>
<tr>
<td>B-</td>
<td>80.0% to 82.49%</td>
</tr>
<tr>
<td>C+</td>
<td>77.5% to 79.99%</td>
</tr>
<tr>
<td>C</td>
<td>72.5% to 77.49%</td>
</tr>
<tr>
<td>C-</td>
<td>70.0% to 72.49%</td>
</tr>
<tr>
<td>D+</td>
<td>67.5% to 69.99%</td>
</tr>
<tr>
<td>D</td>
<td>62.5% to 67.49%</td>
</tr>
<tr>
<td>D-</td>
<td>60.0% to 62.49%</td>
</tr>
<tr>
<td>F</td>
<td>Below 60%</td>
</tr>
</tbody>
</table>

Study Guides, Projects, and Assignments

You must complete and submit ALL study guides, projects, and assignments. You must submit them the day they are due. Late submissions of projects will bear a 1 full grade lower penalty. Study guides count towards class participation. Each study guide or assignment not submitted reduces your course grade 1 point. Study guides includes, but not limited to end of chapter QP (Questions and Problems) and AQ (Assignment Questions). Before submitting your study guide assignment make a copy of your completed study guide assignment so you can use it to study. Make sure it is neat and easy to read. Also make sure that it is in your own handwriting. ***** Do not photo copy and submit the study guide of someone else.

Some databases that are available at Brooklyn College that would be relevant to the class (all of the databases mentioned below are available remotely):

+ Business Source Premier -- access to full-text, scholarly materials (as well as trade publications, case studies)
+ Communication & Mass Media Complete - access to full-text, scholarly materials, trade publications, etc.
+ Business & Company Resource Center - search for company or industry information & profiles (rankings, products & brands, chronologies, etc.), contains some articles, but does not have a robust searching interface. (articles could discuss management issues/best practices for a company/industry)
+ Academic Search Premier - access to full-text, scholarly materials, popular magazines, trade publications, newspapers, etc. This covers many subject areas.
+ JSTOR - everything in this database is available in full-text, all journals are scholarly; -Project Muse - everything in this database is available in full-text, all journals are scholarly; covers many subject areas

To get to these databases from the Brooklyn College Library main page:
+ Under Research Tools, choose Databases for an alphabetical listing (if you know the name of the database you want to search) OR
+ Under Research Tools, choose Resources by subject (to get a list of database in that subject area)

Don't forget the New York Public Library Business Library. (SIBL) has amazing resources

http://www.nypl.org/research/sibl/index.html

how to get a library card ---> http://www.nypl.org/books/cards.html
Code of Conduct

This Code of Conduct highlights and supplements, but does not replace the Code of Conduct issued by Brooklyn College and/or The City University of New York (C.U.N.Y.). The goal of this code is to maximize the classroom experience for all. Your course grade is in part a function of your:

1. exam, project, and quiz results
2. level of participation
   a. projecting a positive attitude
   b. making intelligent and relevant remarks
3. accurate completion and timely submission of study guides

There are other factors that can have a significant impact on your course grade and they include:

- Cheating
  - (calculators, phones, ipods, pda’s, blackberry’s, treo, and other devices are NOT allowed during any exam)

- Disruptive Behavior
  - Rudeness
  - Disrespect
  - Lateness
  - Interrupting the lecture

- Frequent absence
  - Signing the attendance sheet and leaving OR signing for someone else

- Failure to turn off electronic devices (cell, phones, pagers etc)

Penalties

Violation of this Code of Conduct and other rules of Brooklyn College and C.U.N.Y. can result in:

- Lowering your course grade one full letter per offense
- Receiving an F or failing grade for the course
- Being suspended or expelled from the college or university
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 13. The Black-Scholes-Merton Model.
 14. Options on Stock Indices, Currencies, and Futures.
 15. Greek Letters.
 17. Basic Numerical Procedures.
 18. Value at Risk.
 20. Credit Risk.
 22. Exotic Options.
 25. Martingales and Measures.
 27. Convexity, Timing, and Quanto Adjustments.
 28. Interest Rate Derivatives: Models of the Short Rate.
 29. Interest Rate Derivatives: HJM and LMM.
 30. Swaps Revisited.
 31. Real Options.
 32. Derivatives Mishaps and What We Can Learn from Them.
## Reading Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Reading Assignments</th>
<th>Due Dates</th>
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<td>1</td>
<td>Jan 29</td>
<td>Risk Dynamics (Chapter 1)</td>
<td></td>
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<td>2</td>
<td>Feb 5</td>
<td>Mechanics of Futures (2)</td>
<td>Chapters 2 &amp; 3</td>
<td>AQ 1.26, 1.27, 1.28, 1.29</td>
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<td>Hedging Strategies (3)</td>
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<td>3</td>
<td>Feb 12</td>
<td>Lincoln’s Birthday – <strong>College Closed</strong></td>
<td>College Closed</td>
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<td>Feb 15 – No Class</td>
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<td>Feb 19</td>
<td>Presidents Day – <strong>College Closed</strong></td>
<td>College Closed</td>
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<tr>
<td></td>
<td></td>
<td>Feb 21 – No Class</td>
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<td>Feb 26</td>
<td>Interest Rates (4)</td>
<td>Chapters 4 &amp; 5</td>
<td>QP 2.1 – 2.15, QP 3.1 – 3.18, AQ 3.23 – 3.26</td>
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<td></td>
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<td>Forward &amp; Future Prices (5)</td>
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<td>6</td>
<td>March 5</td>
<td>Interest Rate Futures (6)</td>
<td>Chapters 6 &amp; 7</td>
<td>QP 4.1-4.23, AQ 4.24-4.28, QP 5.1-5.12, AQ 5.24-5.27</td>
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<td>Swaps (7)</td>
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<td>7</td>
<td>March 12</td>
<td>Options Markets (8)</td>
<td>Chapters 8 &amp; 9</td>
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<td>Properties of Stock Options (9)</td>
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<td>8</td>
<td>March 19</td>
<td><em><strong>Midterm EXAM</strong></em></td>
<td>Chapters 1,2,3,4,5,6,7,8,9</td>
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<td>9</td>
<td>March 26</td>
<td>Trading Strategies (10)</td>
<td>Chapter 10</td>
<td>Go to web</td>
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<td>Options on Stock Indices (14)</td>
<td>Chapter 14</td>
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<td>11</td>
<td>Apr 9</td>
<td>Spring Break</td>
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<td>12</td>
<td>Apr 16</td>
<td>Credit Risk (20)</td>
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<td>Credit Derivatives (21)</td>
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<td>13</td>
<td>Apr 23</td>
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<td>14</td>
<td>Apr 30</td>
<td>Independent Study</td>
<td>No Class</td>
<td>-</td>
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<td>15</td>
<td>May 7</td>
<td>Real Options (31)</td>
<td></td>
<td>Submit Project 3</td>
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<tr>
<td>16</td>
<td>May 14</td>
<td>Last Day of Class</td>
<td>Review</td>
<td>Go to web</td>
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<tr>
<td></td>
<td>May 21-25</td>
<td>Cumulative 6-8PM</td>
<td>FINAL Exam</td>
<td></td>
</tr>
</tbody>
</table>
below is a list of the important dates for the 2007 Spring semester

Monday, January 29 - **First day of class**

Monday, February 5 - Last day to add a course;

Monday, February 12 - College Closed - Lincoln's Birthday

Tuesday, February 13 - Last day to file Pass/Fail application;

Thursday, February 15 - Monday Schedule

Monday, February 19th - College Closed - Presidents Day

Tuesday, February 20 - Last day to drop a course without a grade;

Wednesday, February 21 - Monday Schedule

Thursday, March 15 - Last day to file for Spring 2007 Graduation;

April 2 - 10  Spring Break

**Thursday, April 12 - Last day to resolve Fall 2006 Incomplete grades**

**Thursday, April 12 - Last day to resolve Fall 2006 ABS grades**

Thursday, April 19 - Last day to apply for withdrawal from a course with a W (non-penalty) grade;