FIN 820 - Fall 2006 - Preliminary Syllabus
San Francisco State University
Mr. Alan R. Jung

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TBD  Blackboard: https://www.sfsu.edu/online/bb.htm

Course Description: Analysis and management of corporate financial risk exposure using
financial derivatives. Risk exposures include, market risk, commodity price risk, currency risk,
interest rate risk, credit risk, and liquidity risk.

Prerequisite: BUS 785 with minimum grade of B-.

Prerequisite Caveat: The subjects of financial risk management and financial derivatives are by
their nature, quantitatively demanding. To fully appreciate the subject, students must develop a
quantitative skill set, in conjunction, with their financial and economics intuition.

With this in mind, I highly recommend students complete at least one other 800 level finance
course before taking Fin 820. This will help you develop your financial and economic intuition.
For most students, BUS 785 is simply not enough. Students should be comfortable with
advanced algebra (e.g., solving equations), basic statistics (e.g., means, variances, distributions,
confidence intervals, regression, etc.) and elementary calculus (e.g., you won’t need to take
derivatives, but you should understand what a derivative means). If the extent of your
mathematical training is limited to DS (BA) 510 and DS (BA) 512, then you may find the subject
matter difficult.

Expected Workload: Depending on the extent of your finance and quantitative backgrounds,
the workload commitment to Fin 820 will be very high, perhaps more than any other finance
course you have taken. Consequently, if you work full-time, you should limit your course work
to only this course.

Withdrawal Policy: A student may only withdraw from a course only once. For details, please
see the attached “College of Business (COB) Withdrawal Policy.”

Course Objectives:
The primary objective of this course is to teach students how to quantify risk and how to use
financial derivative to manage these risks. In particular, the course will cover topics which

1 Tentative and subject to change.
include practical applications and strategies developed recently in the industry, as well as, theoretical valuation models (like Black & Scholes and Binomial Option pricing model).

**Textbooks:**
*Required:* Rene Stulz, “Risk Management & Derivatives,” Thomson South-Western, 2003 (0-538-86101-0). The book is not particularly easy to read, and in general, it will require 2 to 3 readings to fully understand the material. I suggest reading each chapter quickly the first time to get an overview of how the material fits together. Then, read it more carefully the second time to gain a deeper understanding. [Buy Text](#).


**Class Website** ([https://www.sfsu.edu/online/bb.htm](https://www.sfsu.edu/online/bb.htm)):
You are automatically enrolled in the Blackboard class when you register for the class.

1. **Official Announcements** will be posted on the Blackboard website. This could include changes to the schedule or clarifications of class-related issues. *It is the student’s responsibility to check the website at least once/week to stay current with the class.*

2. **Supplementary Course documents** may be available for download on the Blackboard website, e.g., lecture PowerPoint slides, homework solutions, case studies, background articles, current articles on risk management, etc.

**Teaching Methodology:** Lecture, in-class problem solving, student case presentations, guest speakers from industry, and class discussions

**Homework, Case Study Assignments, Course Project, Quizzes, and Final Exam:**

1. **Homework:**
   Homework is assigned weekly, and will consist of the end-of-chapter problems from (1) Rene Stulz, “Risk Management & Derivatives.” Unless otherwise stated they are due in 1 week. *You may work together in groups of at most 3 students, and you may hand in a single homework for the group.* I also encourage you to form study groups.
   Homework will be graded on a 0 = unsatisfactory, 1 = satisfactory, or 2 = perfect basis. I encourage you to do the homework, it is the only way for you to learn and fully understand the material.

2. **Case Studies & Course Project:**
   You will be required to complete approximately 2 - 3 case studies. *Case studies* will be available from the FIN 820 Blackboard web portal. You will have approximately 3 weeks to complete them.
Case Study Requirements:
1. Form a consulting group of at least 2 members, but no more than 3. It is up to you to select the members of your group. However, you are free to change the members of the consulting group at any time.
2. Regardless of the number of members in your group, each group will be graded equally and each member will receive the group's grade. Regardless of how much or how little work each member contributes to the group effort, each member will receive the same grade. Therefore, it is to your group's advantage to choose your group members carefully, to police your group members, and to have enough members to efficiently distribute the workload.
3. The report should be organized and structured as if your consulting group were actually presenting its analysis to Ben Bernanke, chairman Federal Reserve Bank.
4. Your group’s grade will depend on your quantitative analysis and on your written presentation, with 50% of your case score going to each part. You must concisely and clearly present your findings, and you must justify your analysis. This implies that I do not want to see a bunch of equations or spread sheets without accompanying explanation and justification.
5. Produce a typed report of at most 10 double-spaced pages. The page limit excludes appendices, tables, charts, etc. In your written presentation, you do not need to rehash the background or introductory material from the case.
6. Time permitting, an oral presentation by your entire group is optional, and the presentation will count towards your class participation grade.

3. Quizzes & Exam:
   a. Tentatively, I anticipate five to seven 30-minute quizzes throughout the semester.
   b. There is a final exam. The final exam will be comprehensive and will stress the understanding of concepts rather than rote memorization.

4. Class Participation:
   Asking clarifying questions in lecture, participating in class discussions, oral presentation of case studies and homework solutions all earn credit towards your class participation grade. Class participation will have a substantial impact on your overall course grade.

5. Grading (tentative):
   Your course grade is based on the following items, and it will be curved based on the class average.

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<thead>
<tr>
<th>GRADE ALLOCATION</th>
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<tbody>
<tr>
<td>Class Participation</td>
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<tr>
<td>Homework</td>
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<tr>
<td>Cases</td>
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<td>Quizzes</td>
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<td>Final</td>
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<td>Total</td>
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Tentative Course Schedule, which may be a bit Ambitious
(Subject to Revision at Any Time)

<table>
<thead>
<tr>
<th>Week</th>
<th>Reading Due</th>
<th>Topics²</th>
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<tbody>
<tr>
<td>1</td>
<td>Ch 1</td>
<td>Overview of Risk Management</td>
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<tr>
<td>2</td>
<td>Ch 2</td>
<td>Investors and Risk Management (essentially, a review of CAPM)</td>
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<tr>
<td>3</td>
<td>Ch 3 (difficult)</td>
<td>Creating Value with Risk Management</td>
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<tr>
<td>4</td>
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<tr>
<td>5</td>
<td>Ch 4 (difficult)</td>
<td>A Firm-Wide Approach to Risk Management</td>
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<tr>
<td>6</td>
<td>Orange County Case</td>
<td>VAR &amp; CAR, Orange County Case</td>
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<tr>
<td>7</td>
<td>Ch 5</td>
<td>Forwards and Futures Contracts</td>
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<tr>
<td>8</td>
<td>Ch 6 (difficult)</td>
<td>Hedging Exposures with Forwards &amp; Futures Contracts</td>
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<td>9</td>
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<tr>
<td>10</td>
<td>Ch 10</td>
<td>Hedging with Options &amp; Option Pricing</td>
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<tr>
<td>11</td>
<td>Ch 11</td>
<td>Dynamic Hedging and the Binomial Model</td>
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<tr>
<td>12</td>
<td>Ch 12</td>
<td>The Black-Scholes Model</td>
</tr>
<tr>
<td>13</td>
<td>Ch 18 tentative³</td>
<td>Credit Risk &amp; Credit Derivatives</td>
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<tr>
<td>14</td>
<td>Ch 9 tentative⁴</td>
<td>Measuring &amp; Managing Interest Rate Risk</td>
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<tr>
<td>15</td>
<td>Slack</td>
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² For a detailed Course Content outline, please see below
³ Time permitting and contingent on guest speaker availability. If there is insufficient time, then the class period will be used as slack to cover prior material.
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