

# FLORIDA ATLANTIC UNIVERSITY™

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 Misc \_\_\_\_\_

## Graduate Programs—COURSE CHANGE REQUEST

|                                  |  |
|----------------------------------|--|
| DEPARTMENT NAME: FINANCE         | COLLEGE OF: BUSINESS   |
| COURSE PREFIX & NUMBER: RMI 6356 | CURRENT COURSE TITLE: CORPORATE RISK MANAGEMENT: A QUANTITATIVE APPROACH |

### CHANGE(S) REQUESTED

|   |   |
|---|---|
| <p>SHOW "X" IN FRONT OF OPTION</p> <p>CHANGE CREDITS FROM _____ TO: _____</p> <p>CHANGE GRADING FROM _____ TO: _____</p> <p>CHANGE PREREQUISITES TO: ADD: JUNIOR STANDING OR HIGHER</p> <p>CHANGE MINIMUM GRADE TO: _____</p> <p>CHANGE COREQUISITES TO: _____</p> <p>CHANGE OTHER REGISTRATION CONTROLS TO: _____</p> <p>OTHER _____</p> | <p>SHOW "X" IN FRONT OF OPTION</p> <p>CHANGE PREFIX FROM _____ TO: _____</p> <p>CHANGE COURSE NO. FROM _____ TO: _____</p> <p>CHANGE TITLE TO: _____</p> <p>CHANGE DESCRIPTION TO:<br/>         THIS COURSE DISCUSSES STATISTICAL APPROACHES TO EVALUATE RISKS, TECHNIQUES FOR RISK CONTROL, AND METHODS TO MEASURE THE EFFECTIVENESS OF RISK STRATEGIES. THIS COURSE ALSO COVERS RISK FINANCING INCLUDING COMMERCIAL INSURANCE AND ALTERNATIVE RISK TRANSFERS.</p> |
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| <b>CHANGES TO BE EFFECTIVE (SPRING 2010):</b> | <b>Attach syllabus for ANY changes to current course information.</b> |
|---|---|

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|--|--|
| Will the requested change(s) cause this course to overlap any other FAU course(s)? If yes, please list course(s).<br>YES                                      NO                      XX | Any other departments and/or colleges that might be affected by the change(s) must be consulted. List entities that have been consulted and attach written comments from each. |
|--|--|

**TERMINATE COURSE, EFFECTIVE (GIVE LAST TERM COURSE IS TO BE ACTIVE):**

Faculty Contact, Email, Complete Phone Number: Emilio Zarruk, Chair, Finance Dept: [Zarruk@fau.edu](mailto:Zarruk@fau.edu), 561.297.3995  
 Cecelia Kempler, Instructor, Finance Dept., [ckempler@fau.edu](mailto:ckempler@fau.edu), 561.297.4180

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| <b>SIGNATURES</b><br>Approved by:<br>Department Chair: <u><i>Ed Zarruk</i></u><br>College Curriculum Chair: <u><i>Wm R McDaniel</i></u><br>College Dean: <u><i>Paul Hart</i></u><br>UGPC Chair: _____<br>Dean of the Graduate College: _____ | <b>DATE</b><br>Date:<br><u>10-9-09</u><br><u>10-27-2009</u><br><u>10-27-09</u><br>_____<br>_____ | <b>SUPPORTING MATERIALS</b><br>Syllabus—must include all criteria as detailed in UGPC Guidelines.<br><br>Go to: <a href="http://graduate.fau.edu/gpc/">http://graduate.fau.edu/gpc/</a> to access Guidelines and to download this form.<br><br>Written Consent—required from all departments affected. |
|--|--|--|

Email this form and syllabus to [sfulks@fau.edu](mailto:sfulks@fau.edu) and [egirjo@fau.edu](mailto:egirjo@fau.edu) one week **before** the University Graduate Programs Committee meeting so that materials may be viewed on the UGPC website by committee members prior to the meeting.

# Corporate Risk Management: A Quantitative Approach

RMI 4353 / RMI 6356

## Syllabus

### Required Texts:

1. *Integrated Risk Management: Techniques and Strategies for Managing Corporate Risk*, published by McGraw-Hill, 2000, 1<sup>st</sup> edition, or the latest edition.
2. *Risk Assessment*, published by AICPCU, 2004, 4<sup>th</sup> edition, or the latest edition.
3. *Risk Control*, 1<sup>st</sup> edition, AICPCU, 2005, or the most recent edition.
4. *Risk Financing*, published by AICPCU, 2006, 4<sup>th</sup> edition, or the latest edition.

### Course Description

Risk is a component of every corporate strategy. How risk is managed ultimately determines the enterprise value of a corporation. Risk management strategies include building value and avoiding loss. Business organizations are regularly exposed to loss-causing events that may have a material impact on the corporation's finances. Risk management requires quantitative and qualitative understanding of the enterprise.

This course will focus on statistical and econometric techniques to quantify risks. Emphasis is placed on students gaining real world experience by being asked to estimate the models using data sets. Risk control focuses on principles of building enterprise value and understanding loss causation and mitigation. Techniques for implementing and measuring the effectiveness of risk strategies follow the development of models.

Risk management is also effected through financing alternatives which include hedging, self-insurance, corporate insurance programs, and capital markets solutions. These techniques include using traditional insurance, loss-sensitive insurance, hedging with various derivative instruments, cash-flow plans, self-insurance, retrospective rating structures, captive insurance structures, finite and integrated risk insurance structures, and other risk financing structures, including catastrophe bonds, catastrophe swaps, exchange-traded options, industry loss warranties, side cars, and contingent capital, and other alternative risk transfer techniques. This course covers basic and complex techniques for developing insurance linked securities and explores enterprise/integrated risk management encompassing insurance risks and financial risks.

The course presents a perspective necessary for global corporations to meet those challenges and opportunities presented by globalization of mature and emerging commercial economies. Fundamental concepts of accounting, economics, finance, statistics, and business communications are integrated with risk management concepts in this course.

### Topics Covered

1. Risk and insurance overview
2. The convergence of insurance and financial risk management
3. Portfolio theory and enterprise risk management

4. Risk management strategy: duality and globality
5. Hedging and insurance
6. Assessing risk exposures
7. Quantitative analysis in risk management
8. Loss control and cash flow analysis
9. Property and liability insurance coverages
10. Noninsurance contractual transfer of risk
11. Reinsurance operations and strategies
12. Alternative risk financing markets
13. Self-insurance
14. Retrospective rating structures
15. Captive insurance
16. Finite and integrated insurance
17. Capital market innovations and insurance linked securities
  - a. Catastrophe bonds
  - b. Insurance derivatives
  - c. Industry loss warranties
  - d. Side cars
  - e. Contingent capital
18. Other alternative risk transfer techniques
19. Investment in insurance linked securities

### **Evaluation**

|             |                           |
|-------------|---------------------------|
| Exam I      | 28% of total grade        |
| Exam II     | 28% of total grade        |
| Final       | 30% of total grade        |
| Assignments | 11% of total grade        |
| Attendance  | See "Class Participation" |

| A      | A-    | B+    | B     | B-    | C+    | C     | C-    | D+    | D     | D-    | F    |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 95-100 | 90-94 | 87-89 | 83-86 | 80-82 | 77-79 | 73-76 | 70-72 | 67-69 | 63-66 | 60-62 | 0-59 |

Your letter grade for the course will be based on your final average and on your efforts that I consider reasonable.

### **Class Participation**

Attendance is required. Students are expected to attend class regularly. Failure to do so will affect your course grade. Each student is permitted three absences for any reason. Students missing three classes or less will get 3 points. Any absences above the permitted four will result in a 1-point deduction for each such absence. Students shall keep track of their own number of absences.

### **Exams**

There will be three exams consisting of 2 midterms and one final. The final may not be comprehensive. However, your instructor reserves the right to administer a comprehensive final exam if he deems it appropriate. All three exams are mandatory. Students will be tested on materials from lectures, assigned readings from the text, and any hand-outs distributed in class or electronically. Make-up exams are not permitted and will only be offered at the discretion of the instructor if the student advised the instructor of the need to miss a scheduled exam far in advance and as soon as possible for the student. The offering of a make-up exam will only be considered where the exam was missed because of extreme and serious circumstances.

### **Assignments**

There will be nine article comments/critiques. The articles will be handed out in class. Your comments/critiques are to be turned in as a team. The entire team is assigned a grade for each article. Each group will turn in one copy. You select your own group, and each group can have up to 3 students.

The comments/critiques are designed for you to find and solve the problems on your own. Generally, they should include three parts as follows:

- 1) Summary,
- 2) Problems/Challenges,
- 3) Critiques/Comments.

Graduate students are also required to write a term paper on risk management and insurance.

### **Blackboard**

This class will make use of a web-based web site using Blackboard. Syllabi, handouts, assignments and other sources are types of information that may be available within this site. Site activities could include exchanging email, engaging in class discussions, and exchanging files. In addition, class email rosters will be a component of the site. Students who do not want their names included in this electronic class roster should consult with the university to restrict their directory information.

### **Academic Dishonesty**

If academic dishonesty does become a problem, I will follow standard university procedures without exceptions.

### **Students with Disabilities**

Any student who feels that he or she may need an accommodation for any sort of disability should consult with the university so that arrangements can be made.