

**FIN 6489**  
**Section 094C**  
**Financial Risk Management**  
**Spring 2015**

**Mod 4: March 9, 2015 – May 1, 2015**

**M W Periods 1-2**

**Room: HGS 140**

**Instructor:** Farid AitSahlia

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This course is a practical introduction to the main concepts of risk management, namely market, credit, liquidity, operational, legal and regulatory, business, strategic, and reputation risk. However, the bulk of the course will focus on financial market and credit risk. The course will make little use of mathematical formalism and will emphasize intuitive *quantitative* arguments. Students are expected to be comfortable with basic probability and statistics and be able to program either in a formal language such as MATLAB, or in Excel. The programming requirement is very minimal and will only apply to the last assignment.

**Topics covered:**

1. Risk perspectives and the regulatory environment
  - moral hazard and adverse selection
  - corporate risk management
  - banks and regulations
  - Value-at-Risk
  - Basel Accords
  - Dodd-Frank Act
  - operational risk
  - model risk
  - credit risk
  - interest-rate risk
  - options risk
  - Risk-adjusted performance evaluation
2. Lessons from major financial disasters
  - a. Barings, Mettalgesellschaft, Orange County (California), Daiwa, Allied Irish Bank, and Long-Term Capital Management
3. Value-at-Risk Estimation
  - a. Analytic approximations (normal, delta-gamma)
  - b. Monte-Carlo simulation
  - c. Historical simulation
  - d. Back-testing and validation
  - e. Software (RiskMetrics)
  - f. Impact on regulatory capital requirements
4. Value-at-Risk pitfalls and limitations. Contrast between long-only portfolios and hedge funds.
5. Risk-management systems and operational risk

**There is no required textbook for this course. However, the following are recommended.**

Title: Value-at-Risk  
Author: Philippe Jorion  
Publisher: McGraw-Hill  
Year: 2007  
ISBN: 0-07-146495-6

Title: Elements of Financial Risk Management  
Author: Peter Christoffersen  
Publisher: Academic Press  
Year: 2011  
ISBN: 0123744482 0

Title: Market Risk Analysis:  
Value-at-Risk Models (Volume IV)  
Author: Carol Alexander  
Year: 2009  
ISBN: 978-0470997888

Title: The Essentials of Risk Management  
Authors: Michel Crouhy, Dan Galai, and Robert Mark  
Publisher: McGraw-Hill  
Year: 2006  
ISBN: 0-07-142966-2

**Grading:**

Based on weekly homework assignment (30%), end-of-module exam (50%), and class participation (20%).

The assignments and exam will evaluate students on their understanding of widely-used risk measures, their common estimation approaches, their advantages and their limitations.

**General policies:**

- Class attendance is mandatory and participation will affect the final grade. Students are therefore strongly encouraged to avoid electronic distractions (e-mail, cell phone texting, web browsing, etc.) during lectures.
- There will be no make-up exam
- Assignments must be turned in on time and will be subject to penalties if late.
- Information on current UF grading policies for assigning grade points can be consulted through the following link:  
<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>
- Students with a disability should contact the instructor at least one week prior to the start of the course to discuss specific accommodations.

Value at risk of \$5 million for 1 week for 5% probability means that there is a 5% probability that the value of the portfolio will fall by more than \$5 million in 1 week. An alternative interpretation is that there is 95% probability that 1 week loss will be no more than \$5 million. Value at risk can be calculated for the range of risks such as: market risk, cash flow risk, credit risk, etc. However, it is most appropriate for variables that can be approximated by normal distribution. Value-at-risk is a statistical measure of the riskiness of financial entities or portfolios of assets. It is defined as the maximum dollar amount expected to be lost over a given time horizon, at a pre-defined confidence level.Â Advanced Liquidity Risk Management. This virtual course will take you through the risks and solutions available to treasury functions with regard to advanced liquidity and capital management. 29 Jun 2020 - 23 Jun 2020. Advanced Liquidity Risk Management. View all events. Training.