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.

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

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

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

- **The Essentials of Risk Management**
  - Title: The Essentials of Risk Management
  - Authors: Michel Crouhy, Dan Galai, and Robert Mark
  - Publisher: McGraw-Hill
  - Year: 2006

**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](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.