

Financial Services & Trading Institutions MASY1-GC 3605 | 101 | Spring 2024 | 01/24/2024 - 05/01/2024 | 3 Credit

Modality: In-person

Course Site URL: https://brightspace.nyu.edu/

General Course Information

Name/Title: John A. Ladyzinski / Adjunct Assistant Professor

NYU Email: John.Ladyzinski@NYU.EDU

Class Meeting Schedule: 01/24/2024 - 05/01/2024 | Wednesday | 06:20pm -- 08:55pm

Class Location: TBD

Office Hours: Students will have an opportunity to schedule via email. Meetings are by

appointment

Description

This course introduces and analyzes the techniques and tools of financial risk management in the context of market, credit and operational risks for financial services firms and trading institutions including sell-side investment banks and buy side firms such as asset managers and hedge funds. Students learn the fundamental financial tools and techniques necessary to be an effective risk manager. The course covers the absolute and relative valuation of financial instruments using accounting and financial information, the time value of money, risk and return characteristics of financial products, risk management terms and techniques, and operational risk management, key risk measurement metrics (P&L attribution, Value at Risk (VaR), and the operational risk issues and their impact on financial and trading institutions.

Prerequisites

1220 - Financial Management

Learning Outcomes

At the conclusion of this course, students will be able to:

- Differentiate the primary types of financial and trading institutions, their core products and services, and the unique credit, market and operational risks associated with each type
- Explain the pricing and valuation of financial instruments (interest rates, foreign exchange, equities, commodities and credit) in cash and derivative markets
- Assess operational risks in financial and trading institutions
- Differentiate market, credit and operational risks
- Propose mitigants to market, credit and operational risk
- Evaluate portfolio risk and return measures

Communication Methods

Be sure to turn on your NYU Brightspace notifications and frequently check the "Announcements" section of the course site. This will be the primary method I use to communicate information critical to your success in the course. To contact me, send me an email. I will respond within 24 hours.



Structure | Method | Modality

There are 14 session topics in this course. The session topics are organized into three (3) areas of study: 1) History, 2) Learning Principles, and 3) Instructional Design in Practice.

Active learning experiences and small group projects are key components of the course. Assignments, papers, and exams will be based on course materials (e.g., readings, videos), lectures, and class discussions. Course sessions will be conducted synchronously on NYU Zoom, which you can access from the course site in NYU Brightspace.

Expectations

Learning Environment

You play an important role in creating and sustaining an intellectually rigorous and inclusive classroom culture. Respectful engagement, diverse thinking, and our lived experiences are central to this course, and enrich our learning community.

Participation

You are integral to the learning experience in this class. Be prepared to actively contribute to class activities, group discussions, and work outside of class

Assignments and Deadlines

Please submit all assignments to the appropriate section of the course site in NYU Brightspace. If you require assistance, please contact me BEFORE the due date.

Course Technology Use

We will utilize multiple technologies to achieve the course goals. I expect you to use technology in ways that enhance the learning environment for all students

Feedback and Viewing Grades

I will provide timely meaningful feedback on all your work via our course site in NYU Brightspace. You can access your grades on the course site Gradebook

Attendance

I expect you to attend all class sessions. Attendance will be taken into consideration when determining your final grade.

Refer to the SPS Policies and Procedures page for additional information about attendance.

Textbooks And Course Materials

Required reading materials for this course are:

Title: Risk Management and Financial Institutions (Sixth Edition)

Author: John C. Hull ISBN-13: 9781119932482 ISBN-10: 1119932483

Publisher: Wiley Publishing (2023)



Title: A History of the United States in Five Crashes

Author: Scott Nations
ISBN-13: 978-0-06-246728-7
Publisher: William Morrow,

Both books can be purchased either at the NYU Bookstore or online (Amazon.com).

Recommended reading materials for this course are:

Wall Street Journal

• Online Business News Sites: CNN Money, NY Times, Reuters

Grading | Assessment

Your grade in this course is based on your performance on multiple activities and assignments. Since all graded assignments are related directly to course objectives and learning outcomes, failure to complete any assignment will result in an unsatisfactory course grade. All written assignments are to be completed using APA format and must be typed and double-spaced. Grammar, punctuation, and spelling will be considered in grading. Please carefully proof-read your written assignments before submitting them for a grade. I will update the grades on the course site each time a grading session has been completed—typically three (3) days following the completion of an activity.

Homework/Forum Assignments (10%)

Homework assignments will involve a set of problems and computer projects taken from both the textbook and other sources. Missed assignments will lower the student's grade based on the percentage of the grade allocable to it. Relevant reading and writing assignments are listed next to the topic outlined in the course coverage section below. You will be graded on the quality, completeness, thoughtfulness and of your submission.

Homework is to be submitted electronically through Brightspace in Microsoft Office (Word, Excel, PowerPoint) or equivalent form. Due date is **February 22**, **March 1**, **March 8**.

- Name, Course and Section Number at top of each page
- Homework must be posted by the BEGINNING of the class following the assignment

Forums assignments are to be submitted thru Brightspace as well. There are currently four (4) forums scheduled:

Forum #1: Junk Bonds
 Forum #2: Dodd-Frank
 Assigned: Wed, Jan 24 - Due: Wed, Jan 31
 Assigned: Wed, Apr 3 - Due Wed, Apr 10

Class Participation (10%)

Active participation in class discussion is an important part of the classroom experience. The goal is to learn from others and allow them to learn from you. All contributions count, including questioning, listening, and responding. Prior to class, make sure you prepare by reviewing the current readings and topics in relation to the course. Other ways to contribute to the class include building on what someone else has said, paraphrasing a point someone has already made and build on it, or disagreeing with someone (including the instructor) in a respectful and constructive way. You might reflect the comment back to



the speaker to indicate that you have listened well. If possible, point out what is interesting or compelling in someone's comment before explaining why and how you disagree.

Midterm Exam (25%) /Final Exam (25%)

Exams require a thorough understanding of the concepts covered both in the classroom lectures and in the textbooks. The midterm and final exams may include multiple choice, true/false and case studies requiring problem-solving techniques. If you cannot attend a scheduled exam you must have a very good, documented reason and you must contact me in advance. In the event there is a compelling, authenticated reason, a make-up exam may be given at my discretion. However, it need not be of the same type, length, or format as the original exam.

The mid-term exam is worth 25% of your grade and will be given on **03/06/24**. The Final Exam will be given on **05/01/24** and is worth 25% of your grade.

Case Study: The History of the United States in Five Crashes (30%)

This will be a group presentation discussing the events leading to, and the student's views on, the 5 stock market crashes discussed in the book "The History of the United States in Five Crashes". Materials to be used will include the Five Crashes book, the assigned text, materials reviewed in class, and any pertinent news articles you may find. Your grade is comprised of two (2) components:

- i. An overall presentation grade which all members of that group will receive (40%). You will be assessed on the quality of your materials, the sources referenced, and the organization of the overall clarity of the presentation.
- ii. An individual component where each student will be assessed on their in-person presentation *and* must provide a breakdown of their individual responsibilities in the overall group project by dividing specific sections of the project and identifying who was responsible for each section (60%)

A soft copy of your presentation must be submitted by Sunday, April 21. Class Presentations will be Wednesday, April 24.

Assignment and Evaluations Breakdown

Individual performance will be based upon class participation, and the results of homework assignments, a midterm exam, a cumulative final exam, and the individual component of the case study. The respective weights in determining your final grade will be as follows:

| <u>DESCRIPTION</u> | <u>PERCENTAGE</u> |
|------------------------|-------------------|
| Class Participation | 10% |
| Homework | 10% |
| Midterm Exam | 25% |
| Presentation & Paper | 30% |
| Individual Grade (60%) | |
| Group Grade (40%) | |
| Final exam | 25% |
| Total: | 100% |
| | |



See the <u>"Grades" section of Academic Policies</u> for the complete grading policy, including the letter grade conversion, and the criteria for a grade of incomplete, taking a course on a pass/fail basis, and withdrawing from a course.

Course Outline

Start/End Dates: 01/24/2024 - 05/01/2024/ Wednesday

Time: 06:20pm -- 08:55pm

No Class Date(s): Wednesday - 3/20/2024 Special Notes: Spring Break 03/18/24 - 03/24/24

Week by Week Outline: Spring 2024

| # | Date | Material Covered | Readings | Assignment | Assignment Due | |
|----|--------|---|--|-------------------------|----------------|--|
| 1 | 24-Jan | Introduction: Risk & Return | 1 | Forum #1: Junk Bonds | 31-Jan | |
| 2 | 31-Jan | Banks | 2 | | | |
| 3 | 7-Feb | Insurance Companies & Pension Plans | 3 | | | |
| 4 | 14-Feb | Mutual Funds, ETFs, & Hedge Funds | 4 | HW #1: | 22-Feb | |
| 5 | 21-Feb | Trading in Financial Markets (Part 1) | 5 | HW #2: | 1-Mar | |
| 6 | 28-Feb | Trading in Financial Markets (Part 2) | 5 | HW #3: | 8-Mar | |
| 7 | 6-Mar | Securitization & the Global Financial Crisis | 7 | | | |
| 8 | 13-Mar | Midterm Exam | Chapters 1-6 | | | |
| | 20-Mar | No Class: Spring Break | | | | |
| 9 | 27-Mar | Basel I, Basel II, & Solvency II, | 25 | | | |
| 10 | 3-Apr | Basel II.5, Basel III, & Post-Crisis Changes Regulation of OTC Derivative Markets | 26 6 | Forum #2: | 10-Apr | |
| 11 | 10-Apr | Operational Risk – Guest Speaker | 20 | | | |
| | | Estimating Default Probabilities | 17 | | | |
| 12 | 17-Apr | Derivative Risk Risk Management Mistakes to Avoid | 15 30 | | | |
| | 20-Apr | A History of the United States in Five Crashes Presentations Due | | | | |
| 13 | 27-Apr | Presentations: A History of the United States in Five Crashes | | | | |
| 14 | 1-May | Final Exam | All Chapters: 1-5, 7, 15-17, 19, 23 A History of the United States in Five Crashes | | | |



Note: Chapter Readings are to be completed prior to each session.

PLEASE PAY ATTENTION TO ANNOUNCEMENTS SINCE WE MAY NOT ADHERE STRICTLY TO THE SCHEDULE LISTED ABOVE.

Session 1, 01/24/24

Chapter 1: Course Introduction / Risk vs. Return for Investors

- · Risk and the Investor
- · Types of Risk
- Expected Return
- Pricing Models
- Risk and the Company
- Managing Risk
- √ This session sets the background for risk management from the point of view of investors & companies with emphasis on institutional portfolio managers (buy side) and banks (sell side).
- ✓ Please Read Chapter: Risk Management and Financial Institutions, Chapter 1 prior to class.
- ✓ Forum #1: Why would you invest in a non-investment grade ("junk") bond?

Session 2, 01/31/24

Forum #1 Due prior to start of class

Chapter 2: Banks

- Commercial Banking
- Capital Requirements
- Investment Banking
- Securities Trading
- Risks Facing Banks
- ✓ Please Read Chapter: Risk Management and Financial Institutions, Chapter 2 prior to class.

Session 3, 02/07/24

Forum #2 Due prior to start of class.

Chapter 3: Insurance Companies & Pension Plans

- The insurance sector within the economy
- Types of Insurance
- How insurance companies manage risk
- The Reinsurance Sector Financial Analysis of Insurance Companies
- Convergence of Capital Markets and the Insurance Sector
- Similarities and Differences between pension plans and life insurance



- The focus shall be on highlighting the specific characteristics of insurance risk and underwriting as well as the growing convergence between insurance and the capital markets.
- ✓ Please Read Chapter: Risk Management and Financial Institutions, Chapter 3 prior to class.
- √ Homework: None

Session 4, 02/14/24

Chapter 4: Mutual Funds & Hedge Funds

- Types of Mutual Funds
- Hedge Funds
- Hedge Fund Strategies
- ✓ Please Read Chapter: Risk Management and Financial Institutions, Chapter 4 prior to class.
- √ Homework #1: Due next class.

Session 5, 02/21/24

Homework #1: Due prior to start of class

Chapter 5: Trading in Financial Markets

- Overview of fixed income and derivatives products and markets
- Major risks facing investors and corporate risk managers
- What instruments are available for hedging
- Risk Management Challenges
- Impact of financial reform on the availability of hedging products
- √ The section on financial instruments, sessions 5 & 6, provides an overview of the major capital markets instruments and risks as well as the instruments available to offset them.
- √ Please Read Chapter: Risk Management and Financial Institutions, Chapter 5 prior to class.
- √ Homework #2: due next class

Session 6, 02/28/24

Homework #2: Due prior to start of class

Chapter 5: Trading in Financial Markets

- Overview of fixed income and derivatives products and markets
- Major risks facing investors and corporate risk managers
- What instruments are available for hedging
- Risk Management Challenges
- Impact of financial reform on the availability of hedging products



- √ The section on financial instruments, sessions 4 & 5, provides an overview of the major capital markets instruments and risks as well as the instruments available to offset them.
- ✓ Please Read Chapter: Risk Management and Financial Institutions, Chapter 5 prior to class.
- √ Homework #3: Due prior to start of class.

Session 7, 03/06/24

Chapter 7: Securitization & the Global Financial Crisis

- US Housing Market
- Securitization
- ABS & CDOs
- ✓ Please Read: Risk Management & Financial Institutions, Chapter 7 prior to class.
- √ Forum #3:

Session 8, 03/13/24

Homework #3 due prior to start of class

Review & Mid-Term Exam

- Review/Questions on Materials for Exam
- Midterm Exam
- ✓ Please Review Chapters: Risk Management and Financial Institutions, Chapters 1-5, 7 for exam
- √ Homework: None

Session 9, 03/27/24

Chapter 15: Basel I, Basel II, and Solvency II

- Bank Regulation
- Basel 1, II
- Solvency II
- √ This session focuses on bank regulations including the Basel accords as well as insurance regulation (Solvency II).
- ✓ Please Read: Risk Management and Financial Institutions, Chapter 15 prior to class.
- √ Homework: None

Session 10, 04/03/24

Chapter 16: Basel 2.5, Basel III, and Other Post-Crisis Changes

Basel II.5, III



Dodd-Frank

Chapter 6: Regulation of OTC Derivative Markets

- Clearing Houses
- Central Clearing Party (CCP)
- Bilateral Clearing & Central Clearing
- ✓ Please Read: Risk Management and Financial Institutions, Chapters 16, 6 prior to class.
- √ Forum #2: Dodd-Frank

Session 11, 04/10/24

Forum #2: Due prior to start of class

Chapter 20: Operational Risk

- Guest Speaker will discuss Managing Operational Risk for a Major Wall Street firm.
- Definition
- Regulatory capital
- Categorizing operational risks
- Loss severity and loss frequency
- Forward looking approach
- Operational risk capital
- Sarbanes-Oxley

Chapter 17: Estimating Default Probabilities

- Credit Ratings
- Historical Default Probabilities
- Recovery Rates
- Credit Default Swaps
- Default Probabilities

Please Read: Risk Management and Financial Institutions, Chapter 20, 17 prior to class.

Session 12, 04/17/24

Forum #3 Due prior to start of class

Chapter 15: Derivative Risk

- This chapter explains what are termed the "Greek letters" or simply the "Greeks."
- Each of the Greeks measures a different aspect of the risk in a trading position.
- Traders calculate their Greeks at the end of each day and are required to act if the internal risk limits of the financial institution they work for are exceeded.
- Failure to take this action is liable to lead to immediate dismissal.

Chapter 30: Risk Management Mistakes to Avoid

- Many of the losses we will consider occurred because systems were inadequate so that the risky positions being taken were simply not known.
- It is also important for risk managers to continually "think outside the box" about



what could go wrong so that as many potential adverse events as possible are identified.

- ✓ Please Read: Risk Management and Financial Institutions, Chapters 15 & 30 prior to class.
- √ Homework: None

April 20, 2024

A History of the United States in Five Crashes Presentations Due

Session 13, 04/24/24

Book Review: A History of the United States in Five Crashes

- Student Group Paper and Presentation: : A History of the United States in Five Crashes
- Course Review
- √ Required reading: The Big Short Michael Lewis
- √ Homework: None

Session 14, 05/01/24

Review & Final Exam

- Review/Questions on Materials for Exam
- Final Exam
- ✓ Please Review Chapters: Risk Management and Financial Institutions, Chapters 1-7, 15, 17, 20, 25, 26, and 30 for the Exam.

NOTES:

The syllabus may be modified to better meet the needs of students and to achieve the learning outcomes.

The School of Professional Studies (SPS) and its faculty celebrate and are committed to inclusion, diversity, belonging, equity, and accessibility (IDBEA), and seek to embody the IDBEA values. The School of Professional Studies (SPS), its faculty, staff, and students are committed to creating a mutually respectful and safe environment (*from the SPS IDBEA Committee*).



New York University School of Professional Studies Policies

- 1. <u>Policies</u> You are responsible for reading, understanding, and complying with University Policies and Guidelines, NYU SPS Policies and Procedures, and Student Affairs and Reporting.
- 2. <u>Learning/Academic Accommodations</u> New York University is committed to providing equal educational opportunity and participation for students who disclose their dis/ability to the <u>Moses Center</u> for Student Accessibility. If you are interested in applying for academic accommodations, contact the <u>Moses Center</u> as early as possible in the semester. If you already receive accommodations through the <u>Moses Center</u>, request your accommodation letters through the <u>Moses Center Portal</u> as soon as possible (mosescsa@nyu.edu | 212-998-4980).
- 3. <u>Health and Wellness</u> To access the University's extensive health and mental health resources, contact the NYU Wellness Exchange. You can call its private hotline (212-443-9999), available 24 hours a day, seven days a week, to reach out to a professional who can help to address day-to-day challenges as well as other health-related concerns.
- 4. <u>Student Support Resources</u> There are a range of resources at SPS and NYU to support your learning and professional growth. For a complete list of resources and services available to SPS students, visit the NYU SPS Office of Student Affairs site.
- 5. <u>Religious Observance</u> As a nonsectarian, inclusive institution, NYU policy permits members of any religious group to absent themselves from classes without penalty when required for compliance with their religious obligations. Refer to the <u>University Calendar Policy</u> on <u>Religious Holidays</u> for the complete policy.
- 6. <u>Academic Integrity and Plagiarism</u> You are expected to be honest and ethical in all academic work. Moreover, you are expected to demonstrate how what you have learned incorporates an understanding of the research and expertise of scholars and other appropriate experts; and thus recognizing others' published work or teachings—whether that of authors, lecturers, or one's peers—is a required practice in all academic projects.

Plagiarism involves borrowing or using information from other sources without proper and full credit. You are subject to disciplinary actions for the following offenses which include but are not limited to cheating, plagiarism, forgery or unauthorized use of documents, and false form of identification

Turnitin, an originality detection service in NYU Brightspace, may be used in this course to check your work for plagiarism.

Read more about academic integrity policies at the NYU School of Professional Studies on the Academic Policies for NYU SPS Students page.

7. <u>Use of Third-Party Tools</u> - During this class, you may be required to use non-NYU apps/platforms/software as a part of course studies, and thus, will be required to agree to the "Terms of Use" (TOU) associated with such apps/platforms/software.

These services may require you to create an account but you can use a pseudonym (which may not identify you to the public community, but which may still identify you by IP address to the company and companies with whom it shares data).

You should carefully read those terms of use regarding the impact on your privacy rights and intellectual property rights. If you have any questions regarding those terms of use or the impact on the class, you are encouraged to ask the instructor prior to the add/drop deadline.