

Finance & Risk Engineering

SPRING 2024 FIN-UY 2203 I ► Corporate Finance and Financial Markets Tuesday, 6PM – 8:30PM 6 MetroTech Center, 203

Instructor Information

- Lecturer: Bruno G. Kamdem, Ph.D.
- Contact: bgk8384@nyu.edu; (410) 772-3948.
- Office Hours: Tuesday, 3:30PM 5:30PM or by appointment.

Teaching Assistant

- Name: Sofia Guo
- Contact: fg2283@nyu.edu.
- Office Hours: Wednesday, 2PM 4PM.

Course Information

- **Prerequisite:** MA-UY 2054 or MA-UY 2212 (or MA-UY 2224) or MA-UY 3014 or MA-UY 3514, 8 credits of calculus, and Sophomore Standing or higher.
- Credits: 3
- **Term:** January 22 May 6, 2024.
- Class Description:

This course offers a comprehensive exploration of financial principles essential for leaders in finance and engineering. Beginning with an Introduction to Financial Management, students are introduced to Fundamental Concepts, gaining a solid understanding of financial assets and the intricacies of investing in long-term assets through Capital Budgeting. The course addresses the pivotal crossing of Capital Structure and Dividend Policy in financial contexts, emphasizing the impact on business models. Working Capital Management, Financial Forecasting, and Multinational Financial Management provide insights into efficient financial operations within the global finance landscape. Special Topics, including Derivatives and Risk Management, equip students with tools to navigate engineering-specific financial challenges. Through a blend of theory and practical applications, this course empowers students with the financial acumen necessary for successful decision-making in their field. This course serves as a prerequisite for all FIN classes at the 3000 level.

- Learning Goals: This course aims at the following key goals:
 - 1. Grasp the principles of corporate finance (assets valuation, risk management, market efficiency)
 - 2. Explain the core concepts in financial management (e.g., capital budgeting and capital structure)
 - 3. Apply financial principles to real-world scenarios (e.g., assessing financial risks)
 - 4. Analyze financial data and statements to assess the financial health of a company
 - 5. Assess the efficiency of financial markets and their ability to reflect relevant information
 - 6. Evaluate the effectiveness of different financial forecasting methods

• Structure:

Weekly in-person lectures, student presentations, and possible expert panel discussions will constitute the core of this course. Weekly homework assignments, group projects, a midterm, and a final exam will frame the course. Refer to the Course Schedule (see page 7) for specific details on the course assignments and deadlines.

• Materials:

- Required Textbook:
 - * <u>Fundamentals of Financial Management</u>, Eugene F. Brigham and Joel F. Houston, Cengage Publisher, 15th Edition, ISBN-10: 9781337395250, ISBN-13: 978-1337395250
- Software:
 - * <u>Microsoft Excel</u>
- CURRENT INDUSTRY/ACADEMIC ARTICLES

• Readings:

Selected chapters of the above core text and industry/academic articles (see page 6) are available on "Course Reserves" for your convenience (see *NYU Brightspace*). In addition, weekly lecture notes will be available prior to class to all students on *NYU Brightspace*.

• Resources:

- Access to course materials: NYU Brightspace.
- Databases, journal articles, miscellaneous: Bern Dibner Library.
- Collection of business research resources: NYU Business Library.
- -24/7 technology assistance:
 - * Tandon IT Help Desk: soehelpdesk@nyu.edu, (646) 997-3123.
 - * NYU IT Service Desk: AskIT@nyu.edu, (212) 998-3333.

• Expectations:

Weekly readings should be reviewed by students prior to class. Students should attend classes and come prepared to engage, participate, and ask questions on concepts they do not fully grasp from the lecture notes. All assignments are due at 11:59pm on the last day of the class week (see the full Course Schedule on page 7). All assignments should be submitted on time to the Teaching Assistant. It is important that you spend the necessary time working in this course to achieve the expected outcomes by the end of the term. If you face challenges at any time during the semester, please let me know. Please contact me if you expect to miss class. I am available and ready to support your success.

Performance Evaluation

(1) Class Presentation:

The weekly presentations are designed to enhance understanding, critical thinking, and application of concepts covered in the corresponding lecture. The presentation will provide an opportunity for students to explore practical applications, current trends, and real-world examples within the realm of Corporate Finance and Financial Markets. The presentation must directly relate to the main theme or topic covered in the lecture scheduled for that week. This ensures a cohesive and comprehensive exploration of the course material. Where applicable, include insights into current market trends, developments, or news that align with the week's topic. This encourages you to stay informed about the dynamic nature of financial markets. You will be assigned to groups of three or four (depending on the size of the class). I suggest that you prepare for every class in study groups whether or not there is a group assignment. Each group will lead a brief 10 to 15 minutes verbal discussion at the beginning of each class. For grading purposes, it is imperative that you submit your slides (after your presentation) with the names of group participants on *NYU Brightspace*. To earn full credit, you will have to follow the class presentation grading rubric that will be provided. Sources for markets updates should be serious and credible references such as The *Wall Street Journal*, the *Financial Times, Bloomberg*, the *Economist*, \cdots . The University is already subscribed to most credible journals. You can find them

directly linked on the *NYU Libraries* website under "Articles & Databases" \rightarrow "Business" \rightarrow "Articles, News, & Working Papers" or "Company & Financial Information".

(2) Group Project:

The group project will consist of a written and an in-class presentation on a subject relevant to Corporate Finance and Financial Markets related topics. This project will serve as a bridge between theoretical concepts learned in this course and their real-world application, fostering a deeper comprehension of Corporate Finance and Financial Markets. For the purpose of providing effective feedback, experts' evaluations will be resorted to. For the most part, data for the project will be available on WRDS, Bloomberg, or any other credible source. The databases for WRDS and Bloomberg can be found linked on the NYU Libraries website under "Articles & Databases" \rightarrow "Business" \rightarrow "Company & Financial Information". If needed, feel free to contact the School's Librarians or/and the contact Librarian at the above data sources for specific information regarding data for your topic. For grading purposes regarding the presentation part of the project, you will have to submit your slides (after your presentation) with the names of those who participate on NYU Brightspace. To deserve a 100%, you are required to abide by the provided group project presentation grading rubric. Further details on the project will be shared separately in class and on NYU Brightspace. Students will have to form their own groups and submit a written proposal with the subject and details of their group project (sections, subsections, names of members of the group, \cdots) no later than the end of week 7. Please, refer and abide by the deadlines below:

Initial group proposal submission	5%	due by the end of week 7
Revised group proposal submission	5%	due by the end of week 10
Written group presentation submission	10%	due by the end of week 13
In-class group presentation	10%	to be held on weeks 14 and

The above percentage is weighted on your group project's grade which is 30% of your final grade (see below). Each group member must contribute equally to the project. No work for this project may be partially or wholly part of an assignment prepared for another course. In case a student is unable to form a group and/or find a subject on his/her own, he/she will be assigned to a group and/or topic.

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(3) Homework Assignments and Class Attendance:

Weekly homework assignments will be posted on *NYU Brightspace*. All homework assignments should be submitted either physically or electronically by 11:59pm on the due date unless stated otherwise for full credit to the Teaching Assistant. Please, refer to *NYU Brightspace* for the exact due dates. Attendance is expected at each class meeting. If you have to miss a class for family or health obligation, notify me in advance. A class roster will be taken before the start of each class. Consistent and constructive class participation may result in a student's grade being rounded up if very close to a higher letter grade once the curve is complete. Please, regularly check for new announcements on *NYU Brightspace*.

(4) Mid-term and Final Exams:

You will have an in-class Mid-term Exam on week 7. The Mid-term Exam will be closed-book to be completed individually and submitted in class. The **Mid-term Exam** will cover materials we discussed in week 1 through week 6. A one double-sided cheat sheet (A4 paper) will be allowed along with a calculator or excel worksheet session on your lap-top or mac-book. All students are required to take the **Final Exam** at the specified date and time as outlined in the School Spring 2024 schedule. Requests for alternative exam arrangements must be communicated and approved through the appropriate channels in advance. Failure to adhere to the scheduled final exam time without prior authorization may result in academic penalties. It is the responsibility of each student to be aware of and comply with the designated exam period.

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Grading:
  Homework
                             30\%
                             5\%
  Class Presentation
  Midterm Exam
                             15\%
  Group Project
                             30\%
  Final Exam
                             20\%
  TOTAL
                              100%
                                                   if grade \geq 93.33\% \rightarrow A
                                          else if 90\% \leq grade \leq 92.32\% \rightarrow A-
                                          else if 86.67\% < \text{grade} < 89\% \rightarrow \text{B+}
                                         else if 83.33\% \leq grade \leq 86.66\% \rightarrow B
                                          else if 80\% < \text{grade} < 83.32\% \rightarrow \text{B-}
                                          else if 76.67\% \leq grade \leq 79\% \rightarrow C+
                                           else if 70\% \leq \text{grade} \leq 76.66\% \rightarrow \text{C}
                                                              else F
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Academic Misconduct

- (A) Introduction (School of Engineering Student Code of Conduct): The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness, and students at the School of Engineering are expected to exhibit those qualities in their academic work. It is through the process of submitting their own work and receiving honest feedback on that work that students may progress academically. Any act of academic dishonesty is seen as an attack upon the School and will not be tolerated. Furthermore, those who breach the School's rules on academic integrity will be sanctioned under this Policy. Students are responsible for familiarizing themselves with the School's Policy on Academic Misconduct available NYU Tandon's Student Code of Conduct and NYU's Academic Integrity Policy.
- (B) Definition: Academic dishonesty may include misrepresentation, deception, dishonesty, or any act of falsification committed by a student to influence a grade or other academic evaluation. Academic dishonesty also includes intentionally damaging the academic work of others or assisting other students in acts of dishonesty. Common examples of academically dishonest behavior include, but are not limited to the following:
 - 1. **Cheating:** intentionally using or attempting to use unauthorized notes, books, electronic media, or electronic communications in an exam; talking with fellow students or looking at another person's work during an exam; submitting work prepared in advance for an in-class examination; having someone take an exam for you or taking an exam for someone else; violating other rules governing the administration of examinations.
 - 2. Fabrication: including but not limited to, falsifying experimental data and/or citations.
 - 3. **Plagiarism:** intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise; failure to attribute direct quotations, paraphrases, or borrowed facts or information.
 - 4. Unauthorized collaboration: working together on work that was meant to be your own.
 - 5. **Duplicating work:** : presenting for grading the same work for more than one project or in more than one class, unless express and prior permission has been received from the course instructor(s) or research adviser involved.
 - 6. Forgery: altering any academic document, including, but not limited to academic records, admissions materials, or medical excuses.

Inclusion Statement

The NYU Tandon School values an inclusive and equitable environment for all our students. I hope to foster a sense of community in this class and consider it a place where individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations, and abilities will be treated with respect. It is my intent that all students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. If this standard is not being upheld, please feel free to speak with me.

Unexpected Events

You may encounter unforeseen family, health, or other issues during the semester which create circumstances that prevent you from meeting course requirements. In this case, please raise the issue(s) directly with **Deanna Rayment** in the Office of Student Affairs at (646) 997-3046 or deanna.rayment@nyu.edu before requesting any accommodation from me.

Disability Disclosure Statement

Academic accommodations are available for students with disabilities. Please contact the Moses Center for Students with Disabilities (CSD) at (212) 998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.

Use of Generative AI in Coursework

As we embrace advancements in technology, it is crucial to address the ethical and academic considerations surrounding the use of generative AI tools in this class. I would like to outline expectations and guidelines regarding the use of generative AI, encompassing text, images, audio, code, and other forms of generated content. You are expected to disclose whether and how you utilized generative AI tools in completing your projects and homework assignments. Use of such tools are prohibited during Exams. Full transparency is essential for maintaining academic integrity and facilitating open communication. Plagiarism, whether facilitated by generative AI or any other means, is strictly prohibited. All work submitted must be the result of the individual student's effort and understanding. Proper citation is required for any external sources, including generative AI outputs. Refer to *NYU Libraries* and *NYU's* Academic Integrity Policy to gain insights into best practices and considerations when using generative AI tools. Seek clarification from *NYU Libraries* if there are uncertainties about the appropriateness of using generative AI in a specific context. By adhering to these guidelines, I aim to foster an academic environment that promotes responsible use of generative AI while upholding the principles of honesty, transparency, and individual effort. Please familiarize yourselves with these expectations to ensure a fair and ethical learning experience for all.

Readings

MANDATORY

WEEK1	<u>Fundamentals of Financial Management</u> : Chapter 1
WEEK 2	<u>Fundamentals of Financial Management</u> : Chapter 2
WEEK 3	<u>Fundamentals of Financial Management</u> : Chapter 5
WEEK 4	<u>Fundamentals of Financial Management</u> : Chapter 6
Week 5	<u>Fundamentals of Financial Management</u> : Chapter 7
WEEK 6	<u>Fundamentals of Financial Management</u> : Chapter 8
WEEK 7	
WEEK 8	<u>Fundamentals of Financial Management</u> : Chapter 9
WEEK 9	
WEEK 10	<u>Fundamentals of Financial Management</u> : Chapter 3
WEEK 11	<u>Fundamentals of Financial Management:</u> Chapter 4
WEEK 12	<u>Fundamentals of Financial Management</u> : Chapter 18
Week 13	<u>Fundamentals of Financial Management</u> : Chapter 19: Sec. 19.1 - 19.9
WEEK 14	<u>Fundamentals of Financial Management</u> : Chapter 19: Sec. 19.10
WEEK 15	

Course Schedule

WEEK & TOPICS	LECTURE SESSION	ASSIGNMENTS
Week 1		1. Read week 1 materials
(Tue, Jan 23 – Mon, Jan 29)		2. Review class syllabus
		3. Review NYU Brightspace announcements
 Introduction to Corporate Finance 	Tue, Jan 23	4. Confirm reception of welcome email
Course Overview	(6PM – 8:30PM)	5. Homework 1 Due
Week 2		1. Read week 2 materials
(Tue, Jan 30 – Mon, Feb 5)	Tue, Jan 30	2. Class Oral Presentation (Group 1)
 Financial Markets and Institutions 	(6PM – 8:30PM)	3. Homework 2 Due
Week 3		1. Read week 3 materials
(Tue, Feb 6 – Mon, Feb 12)		2. Class Oral Presentation (Group 2)
 Time Value of Money 		3. Homework 3 Due
 Present Values and Future Value 		
 Amortized Loans 	Tue, Feb 6	
Compounding	(6PM – 8:30PM)	
Week 4		1. Read week 4 materials
(Tue, Feb 13 – Mon, Feb 19)		2. Class Oral Presentation (Group 3)
 Interest Rates 		3. Homework 4 Due
 Cost of Money 		
Term Structure	Tue, Feb 13	
• Yield Curve	(6PM – 8:30PM)	
Week 5		1. Read week 5 materials
(Tue, Feb 20 – Mon, Feb 26)		2. Class Oral Presentation (Group 4)
 Bonds and Their Valuation 		3. Homework 5 Due
• Bond Yields	Tue, Feb 20	
• Bond's Riskiness	(6PM – 8:30PM)	
Week 6		1. Read week 6 materials
(Tue, Feb 27 – Mon, Mar 4)		2. Class Oral Presentation (Group 5)
 Risk and Rates of Return 		3. Homework 6 Due
 Portfolio Analysis 		
 Risk Premium 		
 Security Market Line (SML) 	Tue, Feb 27	
 Capital Asset Pricing Model (CAPM) 	(6PM – 8:30PM)	
Week 7		1. Initial Group Project Proposal Due
(Tue, Mar 5 – Mon, Mar 11)	Tue, Mar 5	
Midterm Exam (on weeks 1—6 content)	(6PM – 8:30PM)	
Week 8		1. Read week 8 materials
(Tue, Mar 12 – Sun, Mar 17)	Tue, Mar 12	2. Class Oral Presentation (Group 6)
Stocks and their Valuation	(6PM – 8:30PM)	3. Homework 7 Due (on Brightspace)
Week 9	NO	C i P
(Mon, Mar 18 – Sun, Mar 24)	CLASS	Spring Recess
Week 10	CLASS	1. Read week 10 materials
(Tue, Mar 26 – Mon, Apr 1)		2. Class Oral Presentation (Group 7)
• Financial Statements		3. Homework 8 Due
Balance Sheet		4. Revised Group Project Proposal Due
Cash Flow	Tue, Mar 26	4. Revised Group Project Proposal Due
• Taxes	(6PM – 8:30PM)	
Week 11	(0111 - 0.30111)	1. Read week 11 materials
(Tue, Apr 2 – Mon, Apr 8)		2. Class Oral Presentation (Group 8)
• Analysis of Financial Statements		3. Homework 9 Due
Financial Ratios	Tue, Apr 2	
DuPont Equation	(6PM – 8:30PM)	
Week 12	,	1. Read week 12 materials
(Tue, Apr 9 – Mon, Apr 15)		2. Class Oral Presentation (Group 1)
	Tue, Apr 9	3. Homework 10 Due
Derivatives		
Derivatives Risk Management	(6PM – 8:30PM)	
	(6PM – 8:30PM)	1. Read week 13 materials
 Risk Management 	<u>(6PM - 8:30PM)</u>	
• Risk Management Week 13	(6PM - 8:30PM)	1. Read week 13 materials 2. Class Oral Presentation (Group 2) 3. Homework 11 Due
• Risk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) • Multinational Financial Management	(6PM – 8:30PM) Tue, Apr 16	2. Class Oral Presentation (Group 2)
• Risk Management Week 13 (Tue, Apr 16 – Mon, Apr 22)		 Class Oral Presentation (Group 2) Homework 11 Due
• Risk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) • Multinational Financial Management • International Corporate Finance	Tue, Apr 16	 Class Oral Presentation (Group 2) Homework 11 Due
 Risk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) Multinational Financial Management International Corporate Finance Exchange Rate Risks 	Tue, Apr 16	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due
Kisk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) Multinational Financial Management International Corporate Finance Exchange Rate Risks Week 14	Tue, Apr 16 (6PM – 8:30PM)	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials
Kisk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) Multinational Financial Management International Corporate Finance Exchange Rate Risks Week 14 (Tue, Apr 23 – Mon, Apr 29)	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due
Kisk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) Multinational Financial Management International Corporate Finance Exchange Rate Risks Week 14 (Tue, Apr 23 – Mon, Apr 29) Measuring Country Risk	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due Group Project Presentations
Kisk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) Multinational Financial Management International Corporate Finance Exchange Rate Risks Week 14 (Tue, Apr 23 – Mon, Apr 29) Measuring Country Risk Week 15	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due Group Project Presentations Homework 13 Due (on Brightspace)
• Risk Management Week 13 (Tue, Apr 16 - Mon, Apr 22) • Multinational Financial Management • International Corporate Finance • Exchange Rate Risks Week 14 (Tue, Apr 23 - Mon, Apr 29) • Measuring Country Risk Week 15 (Tue, Apr 30 - Mon, May 6)	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23 (6PM – 8:30PM)	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due Group Project Presentations Homework 13 Due (on Brightspace) Group Project Presentations
• Risk Management Week 13 (Tue, Apr 16 – Mon, Apr 22) • Multinational Financial Management • International Corporate Finance • Exchange Rate Risks Week 14 (Tue, Apr 23 – Mon, Apr 29) • Measuring Country Risk Week 15 (Tue, Apr 30 – Mon, May 6)	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23 (6PM – 8:30PM) Tue, Apr 30	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due Group Project Presentations Homework 13 Due (on Brightspace) Group Project Presentations
• Risk Management Week 13 (Tue, Apr 16 - Mon, Apr 22) • Multinational Financial Management • International Corporate Finance • Exchange Rate Risks Week 14 (Tue, Apr 23 - Mon, Apr 29) • Measuring Country Risk Week 15 (Tue, Apr 30 - Mon, May 6) Final Exam Review	Tue, Apr 16 (6PM – 8:30PM) Tue, Apr 23 (6PM – 8:30PM) Tue, Apr 30	 Class Oral Presentation (Group 2) Homework 11 Due Written Group Presentation Due Read week 14 materials Homework 12 Due Group Project Presentations Homework 13 Due (on Brightspace) Group Project Presentations Possible Guest Speaker