Finance and Risk Engineering Department
Course Outline FIN-UY 2203 Section I Corporate Finance and Financial Markets
Class Number: 20906
Fall 2018
Adjunct Professor Norris L. Larrymore, Ph.D.
Wednesday, 6:00 - 8:33PM; JABS 674
(This draft: Saturday, April 28, 2018)

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Office hours: by appointment

Course Pre-requisites: MA-UY 2054 or MA-UY 2212 (or MA-UY 2224) or MA-UY 3012, 8 credits of calculus, and Sophomore Standing or higher.

Course Description:
This course covers the fundamentals of corporate finance, valuation, risk, capital budgeting and market efficiency. Students who complete this class acquire a solid foundation needed for intermediate and advanced topics in finance. This class is a prerequisite for all FIN classes at the 3000 level.

Course Objectives:
The objectives of this course are described below. For the finance major especially, this course serves as the foundation for more advanced work.

- This course aims to develop decision making ability by providing the student with a sense of why and how decisions are made by a company chief financial officer.
- Students are taught to think precisely, lucidly, and logically about how to employ technology to enable them to make quicker, more accurate decisions. Every problem provides an opportunity to find a thoughtful solution.
- Lectures engage in theoretical as well practical knowledge of corporate finance, illustrating concepts by example.
- The course demonstrates how mastery of theory informs the application of knowledge.
- Through case analyses, the students learn to present soundly reasoned arguments.

Course Requirements:

- Calculator: The recommended calculator is HP 17bii+, HP 17bii, or HP 19bii. Student may be more familiar with the Texas Instruments BA II Plus Financial Calculator or BAII Professional Financial Calculator. However, a student may be more familiar with the Texas Instruments BA II Plus Financial Calculator or BAII Professional Financial Calculator. In either case, the student is expected to become proficient in the use of her/his financial calculator, particularly for examinations when no tablet computers, lap-tops, or cellphones are allowed. Borrowing or sharing calculators during an examination is impermissible.

- Readings: For a practical perspective, students are encouraged to peruse and daily read articles that attract their interest in the popular business press: *Financial Times*, *The Wall*

Street Journal, and *The New York Times–Business section.* It is important to be aware of the timely issues and unanswered questions in the practice of corporate finance, which chief financial officers face.

- Required Text: Here is the book that is used most frequently in the preparation of the lecture and from which much of the required reading will be taken.

  - Title: *Fundamentals of Corporate Finance*, 12th Edition;
    Authors: Stephen A. Ross, Randolph W. Westerfield, and Bradford D. Jordan;
    Publisher: New York, N.Y. McGraw-Hill Education, [2019] ISBN 978-1-259-91895-7.

Course Structure

This course has several components: Assignments, cases, research, examination, and participation. Each component and weight attached to it are described below.

- Assignments: 50 points

  - Homework assignments are designed to be instructive, reinforcing concepts through illustration. Coursework includes numerous problem sets with solutions, which are posted sequentially on the course website with the related lecture notes. However, only two problem sets will be collected for a grade. Each set consists of ten problems. Each graded problem set is measured on a 25 point scale. Because solutions are distributed upon collection of assignments and the most challenging problems may be worked out in class immediately following submission, no credit is earned for late assignments and there are no makeup assignments. While students are encouraged to work on the problem sets together for more complete understanding, assignments are expected to be independently prepared and submitted.

  - Assignments are designed to help students gain a better grasp of the material. Thinking about the problems is most important. Solutions to selected problems appear in the appendix of the textbook. Students are strongly encouraged to work on as many problems as possible. To that end, they should try to answer the problem first before looking at the solution. Then, they should view the answer. By using this technique to discover the important concept in each step toward solution, they will gain broader insight.

- Cases: 50 points

  - Following the mid-term examination, there are two case studies and there are two components to each case, an individual component and a group component. Each case is graded on a 25 point scale. Students should know the fundamentals of Excel to analyze the cases. Each case analysis is limited to a maximum of two double-spaced, typewritten pages. Tables and figures may be added to support the two-page narrative.

  - First, the individual component of the case is strictly, independently prepared and submitted at the start of class on the date it is due. Students are expected to bring two copies of their case to class that day: one for the instructor and one for group discussion.

  - Then, students are randomly dispersed among groups of three or four for spirited discussion of the case. The group reaches a consensus and then crafts a two-page analysis of the case based on their discussion. The group submits the case. Fifty percent of the student case grade is based on the individual component and fifty percent is based on the group component. The group component of the case is due by midnight on Friday following the class in which it is due.

- While there is no single correct answer to the cases, there are answers that are more salient. Students must find them, taking a position and rationally supporting it.

- Research Paper: 100 points

  - The research paper provides an opportunity for students to explore more thoroughly an area of interest to them within the bounds of the textbook, which may not be covered in the syllabus. In the first session, comprehensive project guidelines are to be distributed and expectations are discussed. A list of project ideas in the form of key questions is included in the handout, but the list is not exhaustive. Students may select a topic of their own desire, with instructor approval. Basically, the instructor approval is based on whether the selected project is independent of what others are doing, original, doable within the semester timeframe, falls within the scope of the course, and has the necessary data and computing resources for completion.

  - There is a continuum between reading and writing. We learn about writing through reading. Several academic readings that are related to the lecture topics have been chosen and are listed in the course outline. To inform our writing, we go through and engage with them to see how they work and to see how they are constructed. We analyze these works to gain perspective. We note how they fit the time and who is writing. We learn from where the authority of the narrative is derived.

  - The research paper is valued at 100 points and due in class on, Wednesday, December 12th, with a 48 hour grace period through 11:59pm Friday, December 14th. Students may choose to use the extra time to incorporate responses to comments, suggestions, and questions brought up in their presentation. Late papers lose 25 points per day (i.e., approximately 1 point per hour), with the first penalty attached 12:01am Saturday, December 15th.

  - Several workshops are held during the semester to assist students with their writing. The workshops are not mandatory.

- Research Paper Presentation: 50 points

  - - Research project proposal presentation slides are scheduled on Wednesday, October 17th, 2018. Proposal presentation slides are due at 3:00pm that day.

  - The final research project presentation slides are valued at 25 points and due electronically by 3:00PM on Wednesday, December 12, 2018. The remaining 25 points is based on the actual proposal and final presentation session performances, which includes presentation execution, articulation of knowledge, response to questions, and the level of attention accorded to all other presenters. There are no makeup presentations and late submission of presentation slides receives no credit.

- Midterm Examination: 100 points

  - A closed book, in-class midterm examination is administered on Wednesday, October 24th. It consists of 10 problems valued at 10 points each. Students are permitted to bring one sheet of notes double-sided on $8\frac{1}{2}$ by 11 inch paper.

  - There is no makeup examination. Understandably, something unexpected may occur. In such a case, the student should contact the professor immediately, before the exam. Should a medical or other valid reason justify the student's absence, university policy is followed. With appropriate documentation through the office of the undergraduate dean, the student will be accommodated.

- Similarly, at the start of the semester, a student with any form of unobservable documented disability should inform the professor in order that appropriate accommodations may be made.

- Final Examination: 100 points

  - A comprehensive closed book, in-class final examination is administered on Wednesday, December 19th. It consists of 10 problems valued at 10 points each. Students are permitted to bring two sheets of notes double-sided on 8 by 11 inch paper.

  - There is no makeup examination and the examination will not be rescheduled to accommodate travel plans. As written above, students with an unexpected justifiable excuse for missing an examination must contact the professor before the exam. University policy is applied. With appropriate documentation through the office of the undergraduate dean, accommodations are made.

- Participation: 50 points

  - Lectures follow a question and answer format.
  - Students are expected to actively participate in discussions.
  - To contribute to the understanding of topics, students are expected to attend class. Absences adversely impact participation grades.
  - In their absence, students are responsible for obtaining all missed notes and/or materials.

- Grade Distribution:

  - The method of student evaluation is described below. Careful evaluation of student performance is achieved by measuring performance in the following components: Assignments, cases, examinations, research, and participation. Generally, better outcomes come with hard work and proficient execution (skill). Questions regarding the grading procedure are welcome.

  - Component Grade Distribution:

Component	Pct.	Points
Assignments	10	50
Cases	10	50
Research paper	20	100
Research paper presentation	10	50
Midterm exam	20	100
Final exam	20	100
Participation	10	50
Total Points	**100**	**500**

  - Conversion from Percent to Letter Grade :

≥ 93.00	A	77.00 - 79.99	C+
90.00 - 92.99	A-	73.00 - 76.99	C
87.00 - 89.99	B+	70.00 - 72.99	C-
83.00 - 86.99	B	60.00 - 69.99	D
80.00 - 82.99	B-	≤ 59.99	F

Course Policies

- General

  - At all times, professional courtesy is expected in class. That is, students are expected to be respectful of their fellow students. Students are expected to accord other students their complete attention when others speak. Conversations in class, as well as leaving and reentering the room, can be discourteous and distracting to others.
  - Working on matters unrelated to this course in class is discouraged.
  - Electronic communication, text messages, e-mails, and Internet access are not permitted during class.
  - Students are encouraged to stay focused and ask a lot of questions. Through questions, students benefit from the informed opinion of others.
  - Computers are not used in class unless there are specific instructions to do so.

College Policies

- Where New York University policy applies, accommodations are made for a student with a justifiable excuse for missing class and such excuse is appropriately documented through the office of the undergraduate dean.

- Also, the professor must be informed at the start of the semester of any unobservable documented disability in order that appropriate accommodations may be made.

- If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities (CSD) at 212-998-4980, or email 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.

- Students who anticipate being absent due to a religious observance should, whenever possible, notify the professor in well in advance of such anticipated absence.

- Institute Policy on Academic Dishonesty: Introduction[1]

  - NYU-Poly (New York University Polytechnic School of Engineering) encourages academic excellence in an environment that promotes honesty, integrity, and fairness. Students at NYU-Poly (New York University Polytechnic 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 a student may progress academically. Any act of academic dishonesty is seen as an attack upon the Institute, 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 Institute Policy on Academic Dishonesty.

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[1]As it appears in the Academics Code of Conduct.

Course Outline: A tentative schedule of the sessions is shown below. In the outline below, RWJ is the notation used for Ross, Westerfield, and Jordan, the required textbook.

Session(s)	Topic
Sep. 5th	**Introduction to Corporate Finance** • Course Overview • RWJ–Chapter 1–Introduction to Corporate Finance: Goal of the corporation, agency problems.
Sep. 12th	**Valuation of Future Cash Flows** • RWJ–Chapter 5–Introduction to Valuation: The Time Value of Money • RWJ–Chapter 6–Discounted Cash Flow Valuation: Discounted cash flow, annuity, growing annuity, perpetuity, growing perpetuity.
Sep. 19th	**Valuation of Future Cash Flows** • RWJ–Chapter 7–Interest Rates and Bond Valuation: Interest rates, bond valuation, YTM, current yield, term structure. • RWJ–Chapter 8–Stock Valuation: Equity markets, dividend discount model, NPVGO model. • **Problem Set 1 (*Due at the start of class.*)**
Sep. 26th	**Capital Budgeting** • RWJ–Chapter 9–Net Present Value and Other Investment Criteria: Capital budgeting rules, NPV, IRR, PI, payback period, capital budgeting.
Oct. 3rd	**Risk and Return** • RWJ–Chapter 12–Some Lessons from Capital Market History: Efficient markets hypothesis, geometric average return versus arithmetic average return, Sharpe ratio. • **Problem Set 2 (*Due at the start of class.*)**
Oct. 10th	**Risk and Return** • RWJ–Chapter 13–Return, Risk, and the Security Market Line: Portfolio theory, standard deviation, variance, efficient frontier, separation principle, capital market line, Sharpe ratio, CAPM, beta, risk premium, diversification, systematic risk, arbitrage pricing. • COCHRANE, J. (2014): "A Mean-Variance Benchmark for Intertemporal Portfolio Theory," *Journal of Finance*, 1, 1–49. • MARKOWITZ, H. (1952): "Portfolio Selection," *Journal of Finance*, 7, 77–91. • TOBIN, J. (1958): "Liquidity Preference as Behavior Toward Risk," *Review of Economic Studies*, 25, 65–86. • ROY, A. (1952): "Safety First and the Holding of Assets," *Econometrica*, 20, 431–449. • SHARPE, W. (1964): "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *Journal of Finance*, 19, 425–442. • ROSS, S. (1976): "The Arbitrage Theory of Capital Asset Pricing," *Journal of Economic Theory*, 13, 341-360.

Course Outline Continued:

Session(s)	Topic
Oct. 17th	**Research Proposal Presentations** • Presentation of Research Topic.
Oct. 24th	**Midterm Examination** • Midterm Exam covering Chapters 1, 5-9, 12,13.
Oct. 31st	**Financial Statements and Long-term Financial Planning** • RWJ–Chapter 3–Working with Financial Statements.
Nov. 7th	**The Cost of Capital and Long-Term Financial Policy** • RWJ–Chapter 14–Cost of Capital: Cost of equity, cost of preferred, cost of debt, weighted average cost of capital. • RWJ–Chapter 15–Raising Capital: Cost of issuing securities, rights. • RWJ–Chapter 16–Financial Leverage and Capital Structure Policy: Modigliani and Miller model, optimal capital structure, capital structure theories. • **Case 1 (*Due at the start of class*)**
Nov. 14th	**The Cost of Capital and Long-Term Financial Policy** • RWJ–Chapter 16–Financial Leverage and Capital Structure Policy: EPS versus EBIT. • RWJ–Chapter 17–Dividends and Payout Policy: Cash dividend, stock dividend, repurchase, stock split, reverse stock split.
Nov. 28th	**Financial Statements and Long-term Financial Planning** • RWJ–Chapter 2–Financial Statement, Taxes, and Cash Flow: Free cash flow. • **Case 2 (*Due at the start of class.*)**
Dec. 5th	**Financial Statements and Long-term Financial Planning** • RWJ–Chapter 4–Long-Term Financial Planning and Growth: External financing needed(EFN).
Dec. 12th	**Final Research Presentations** • **Final Research Presentations** • **Final Research Paper Due**
Dec. 19th	**Final Examination** • **Final Examination in (*Room TBA*)**