

# Corporate Finance

(FE820 Section E1)

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## Class Schedule and Location

Mondays 6:30-9:15pm, Classroom HAR 240.

## Office Hours

Mondays, 5:00-6:00pm, or by appointment. Office HAR 534.  
Personal Room <https://bostonu.zoom.us/j/7032414140>.

## Course Description and Objective

The objective of this course is to introduce you to the principles of corporate finance, and to provide you with a set of analytical tools necessary to answer the most important questions related to firms' investment and financing policies as well as their valuations.

**Investment decisions.** We will discuss how firms should choose their investments. We will identify cash flows relevant to the valuation of an investment project and discuss popular investment criteria. In addition, we will present some tools for practical investment decision making, including real options. If we have time, we will also discuss different practices of risk management.

**Financing decisions.** We will try to answer some of the most important questions that you will face as a financial manager: Should you raise equity or debt to finance your firm's projects? Do capital structure choices (debt vs. equity) matter for total firm value? What are the consequences of various capital structure changes: debt and equity issues, dividends, and share repurchases?

**Firm valuation.** We will spend a great deal of time on deriving/understanding firm valuations based on different methods, primarily discounted cash flow (or WACC) and adjusted present value (APV).

## Course Material

The course material consists of a set of class slides and a required textbook. The **class slides** will be posted on QuestromTools. The textbook is: "Corporate Finance" by Jonathan Berk and Peter DeMarzo, 4<sup>th</sup> or 5<sup>th</sup> edition, Pearson. Earlier editions of the textbook may be fine too, but you would be entirely responsible for any differences.

# Prerequisites

We will build on the prerequisite core class FE721/722. Even though I aimed at making the class as self-contained as possible, you need to be familiar with basic concepts in probability and statistics. If you have problems even after reviewing the material from previous classes, please let me know.

# Attendance and Class Participation

You are expected to attend all the classes. Missing a few classes is fine, there is no need to notify me, but please let me know if you cannot attend on a regular basis.

Classes start on time. Please do your best to arrive on time. I expect active participation by students. Thoughtful questions, answers, and remarks will be rewarded.

# Performance Evaluation

Performance evaluation will be based on cases, class participation, and a final project. Final grades will be assigned according to the grade guidelines of the Graduate Program Office. The weights on different components of the performance evaluation are the following:

- Class participation: 25%
- Team cases: 25%
- Individual cases: 25%
- Final project: 25%

All violations of the exam rules and the Academic Conduct Code will be submitted to the Academic Conduct Committee (no exceptions). Serious violations will automatically result in failing the class.

# Cases

## Team Cases

For the two team cases, word-processed write-ups (three to five pages of text plus supporting material such as spreadsheets, figures and tables) are due at the start of the case discussion. The two cases for which you are expected to write a team report are:

- Marriott Corporation (due Monday, March 8);
- Congoleum Corporation (due Wednesday, April 21).

Preparation of the case write-ups is done in groups of two to three (compelling reasons need to be given for other group sizes). The cases will be discussed in an open, roundtable type of discussion. This requires that you come to class prepared to discuss the case. I may cold-call individual students for comments or discussion. Please make sure to have your case write-up with you so you can refer to it during class discussion.

The cases are an integral part of the course design. For each case, I will provide you with a hint sheet designed to help focus your analysis. The questions outlined therein are meant to be suggestive but not exhaustive and, therefore, neither the substance nor the organization of your write-up should be limited because of the hint sheet. The following are some general guidelines for preparing case write-ups:

- Highlight your main conclusions in an executive summary (no more than one page) that contains specific results from your analysis.
- Identify the objective and the main issues of the case.
- The main body of your analysis should be self-explanatory and reasonably self-contained. That is, the reader should be able to replicate your results by tracing through the write-ups/spreadsheets.
- State clearly the inputs to your analysis and the chosen methodology. If you feel that certain assumptions need to be made to justify a solution technique or a parameter choice, please make the assumption explicit.
- Justify your findings by providing the intuition. Where appropriate, perform sensitivity analysis and discuss the robustness of your results.

### **Individual Cases**

For the three individual case memos, you will be expected to turn in a two-page memo at the start of class on the day of the case discussion. The memo should be completed on your own, without communication with anyone else. The memo should consist of one executive summary “numbers” page with a quantitative summary of your analysis plus one “analysis” page with a short discussion of the issues in the case. You will be given a hint sheet at least a week prior to the due date for each case. The due dates are currently expected to be as follows:

- Cost of Capital at Ameritrade (due Monday, March 1);
- Bed, Bath, and Beyond: The Capital Structure Decision (due Monday, March 29).

We will also use other cases in class for expositional purposes. Students will be expected to prepare these other cases for a class discussion, but will not be asked to submit a report.

## **Final Project**

The final project should consist of a valuation of a publicly traded company that was the subject of a takeover during the last five years. Determine an independent valuation of the target company at the time of the actual transaction. Use (at a minimum) the following approaches:

- Discounted Cash Flow (or WACC)
- Comparable Company Multiples
- Comparable Acquisition Multiples

Typical papers (write-ups) are 7-10 pages (justifying assumptions, etc.) plus exhibits. However, there is no limit on paper length. selection of companies and teams (3 people max) is due Monday, April 5. Final Papers are due May 3. Final presentations with preliminary results will be on Monday, April 26.

In addition to the final paper, please hand in an executive summary showing the key results of your valuation, the primary obstacles you encountered and how you overcame those obstacles.

Include in your Monday, April 5 deliverables, the following: a) name of the company you will value. It should be a firm that was taken over within the last five years; b) names of all team members; and c) a listing of all sources of information you plan to use in your paper, e.g., analyst reports, etc.

## Course Recording Policy Statement

All class sessions will be recorded for the benefit of registered students who are unable to attend live sessions (either in person or remotely) due to time zone differences, illness or other special circumstances. Recorded sessions will be made available to registered students ONLY via their password-protected QuestromTools account. Students may not share such sessions with anyone not registered in the course and may certainly not repost them in a public platform. Students have the right to opt-out of being part of the class recording. Please contact your instructor or teaching assistant to discuss options for attending the course in such cases.

## Questrom Community Statement of Norms

In addition to the expectations outlined in the COVID-19 Health Commitments & Expectations for BU Students, <https://www.bu.edu/healthway/2020/07/16/student-health-commitment-expectations/>, we expect all members of our Questrom community to adhere to the following classroom norms:

- Use the designated paths and doors to enter and exit the classrooms and move around the Hariri building.
- Use the wipes provided in classrooms to clean desktops and other spaces before and after use.
- Wear an appropriate personal protection equipment (PPE) face covering when in the Hariri building, including in the Hariri classrooms and offices. Students not wearing a face covering will be asked to leave and are expected to comply with the request.
- Be willing to display your “green screen” compliance app upon request (e.g., in class or for a meeting).
- Eat only in the designated locations in the Rafik B. Hariri Building. Eating is NOT permitted in the classrooms. Eating is only permitted in Starbuck/Breadwinners and in student lounges. Only drinking with a straw is permitted in classrooms.
- Update your LfA location and class status (in-person or 100% remote) on the StudentLink as changes occur throughout the semester.
- Attend class remotely if your behavior outside of the classroom might put others in the community at risk.

Adhering to these norms will allow us to continue to enjoy a residential learning experience.

# Course Outline

The following list of topics and references (cases, chapters from the textbook and other readings) describes the material that I plan to cover during the class. This schedule should be considered tentative, as it is likely to change during the course, depending on various factors. Should changes be made, they will be posted on the website and announced in class.

## Class 1 – Monday, January 25

- Topics: The finance function; the goal of the firm and the NPV rule.
- Readings: Berk and DeMarzo, sections 3.1 to 3.4, 4.1 to 4.6, and 7.1.

## Class 2 – Monday, February 1

- Topics: Perpetuities and annuities review; capital budgeting under certainty; carry-backs and carry-forwards.
- Readings: Berk and DeMarzo, sections 3.1 to 3.4, 4.1 to 4.6, and 7.1.

## Class 3 – Monday, February 8

- Topics: Case – Harris Seafoods, Inc. (part I); guest lecture by Matthew Tuttle on SPACs.
- Readings: Berk and DeMarzo, chapters 10, 12.

## Class 4 – Tuesday, February 16

- Topics: Capital budgeting under certainty (cont'd); another alternative to NPV: multiples; capital structure without taxes.
- Readings: Berk and DeMarzo, sections 7.2, 7.3, 7.5 and 14.1 to 14.3. John C. Kelleher and Justin J. MacCormack, August 2004, “Internal Rate of Return: A Cautionary Tale,” *The McKinsey Quarterly* (Web exclusive).

## Class 5 – Monday, February 22

- Topics: Capital budgeting without taxes; capital structure with corporate taxes; weighted average cost of capital with corporate taxes.
- Readings: Berk and DeMarzo, 15.1 to 15.3. Dun Gifford, July 1998: “After the Revolution,” *CFO Magazine*, 75-79.

## Class 6 – Monday, March 1

- Topics: Case – Cost of Capital at Ameritrade (*individual case memo due*); capital budgeting with corporate taxes; multiples and leverage.
- Readings: Berk and DeMarzo, sections 18.1, 18.2, and 18.5.

### **Class 7 – Monday, March 8**

- Topics: Case – Marriott Corporation (*group report due*); adjusted present value.
- Readings: Berk and DeMarzo, sections 18.3, 18.6, and 18.7, and chapter 19. Timothy A. Luehrman, May/June 1997, “Using APV: A Better Tool for Valuing Operations,” *Harvard Business Review* 75, 145-154.

### **Class 8 – Monday, March 15**

- Topics: Comparison and discussion of valuation methods (APV, WACC, and FTE).
- Readings: Berk and DeMarzo, chapter 18.

### **Class 9 – Monday, March 22**

- Topics: Case – Harris Seafoods, Inc. (part II) with focus on comparing WACC and APV; other considerations in capital structure (part I)
- Readings: Berk and DeMarzo, sections 15.4 and 15.5, and chapter 16.

### **Class 10 – Monday, March 29**

- Topics: Case – Bed, Bath, and Beyond: The Capital Structure Decision; Other considerations in capital structure (part II)
- Readings: Berk and DeMarzo, sections 15.4 and 15.5, and chapter 16.

### **Class 11 – Monday, April 5**

- Topics: Leveraged buyouts; RADR, WACC and APV.
- Readings: Berk and DeMarzo, section 28.6. Inselbag and Kaufold, Summer 1989, “How to Value Recapitalizations and Leveraged Buyouts,” *Journal of Applied Corporate Finance* 2, 87-96

### **Class 12 – Monday, April 12**

- Topics: Payout policy.
- Readings: Berk and DeMarzo, chapter 17.

### **Class 13 – Wednesday, April 21**

- Topics: Case – Congoleum Corporation (*group report due*).
- Readings: None.

### **Class 14 – Monday, April 26**

- Topics: Final presentations
- Readings: None.