

Harvard University
Economics 1745

Corporate Finance

Fall 2024

Faculty of Arts and Sciences, Economics Department

Wednesdays, 3:00pm ET – 5:45pm ET

Location: In person

Associate Professor Daniel Bergstresser (Brandeis University)

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<https://sites.google.com/brandeis.edu/daniel-bergstresser/home>

Office hours at weekly time to be decided early in semester based on mutual convenience of class and instructor

Office hours may be held in person and may be held over Zoom or equivalent

Description:

The course is an introduction to corporate finance, including capital budgeting, capital structure of firms, dividend policy, and corporate governance. “Capital budgeting” in this context means decision-making about which potential projects a firm should invest in and which projects should be avoided. The course will introduce and apply a framework for evaluating the impact that corporate financial policies and decisions have on firms’ investors, employees, customers, suppliers, and other relevant stakeholders.

Corporate finance is one part of a larger field of financial economics. Financial economics as a field is concerned with decision-making in contexts that involve tradeoffs across time (invest today, harvest tomorrow) and tradeoffs that involve evaluating potentially uncertain future outcomes. Other courses that are at times offered in financial economics include Capital Markets (Economics 1723), Behavioral Finance (Economics 1760), and The Financial System and the Central Bank (Economics 1759).

Prerequisites: Economics 1745 is intended for undergraduates with significant mathematical background, and who are familiar with or prepared to become familiar with Microsoft Excel. Prerequisites include intermediate microeconomics at the Economics 1010a level, statistics at the level of Statistics 100, and Mathematics 18 or the equivalent, with permission of the instructor.

COURSE OBJECTIVES

The primary objective of this course is to develop the financial skills and frameworks necessary to make and implement decisions related to finance. Upon successful completion of this course, students will have developed an understanding of key concepts of the financial environment

within which a firm's management must operate, the processes of financial analysis, the time value of money, methods of stock and bond valuation and the relationship of valuation to risk and return.

We will look at several basic questions:

- What functions do financial markets serve?
- How do firms use and deal with financial markets to raise capital?
- How do investors approach financial decisions?
- How do we value financial securities, for example stocks and bonds?

We will analyze financial decision-making in a framework that emphasizes the time value of money and the relationship between expected return and risk.

Please note that this syllabus may change somewhat as the course progresses.

Method of Instruction:

The methods of instruction will include lectures, class discussions, and problem solving. We expect that the course lectures this semester will be in-person, although there is obviously a chance that circumstances could force Harvard to pivot to remote or hybrid instruction. This course is fast paced, reasonably technical in nature, and it requires each student to do considerable out-of-class work. I assign required homework for nearly every class session. Problem solving is very important in this course and I encourage participation from all my students in this activity throughout the term. You should read the assigned book chapters prior to coming to class.

COURSE REQUIREMENTS

Course materials Text:

- *Essentials of Corporate Finance*, 11th edition, Ross, Westerfield, and Jordan. Published by McGraw-Hill, 2022.

The materials that I will post for the course on the Canvas site are also important. Reading current business periodicals, such as the *Financial Times* or the *Wall Street Journal* will also be useful. I will comment on current business and financial events, in particular as they may relate to course content. A very important practical benefit of keeping up with current business events is that this knowledge may be useful for you in business-related and finance-related job interviews.

Cases and Additional Readings: Will be either handed out in class or electronically distributed via Canvas or email.

Homework/Problem Sets:

You will also be provided with homework practice problems on various topics throughout the course. You should expect to be assigned homework every class session. These problem sets will be due the following class for grading and review. Problem sets need to be worked out in detail, and the work you turn in must be your own work. We do encourage you to form study groups to work on homework and prepare for exams together.

Late submission of homework will not be accepted except in cases including late enrollment in the course, illness or injury, competition for Harvard teams, religious observance, and bereavement. In addition, every student's aggregate homework score will be computed after dropping the two lowest individual homework grades.

Grading

Grades will be based on the following course elements, with the weights below:

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|------------------------|-----|
| • Class Participation | 5% |
| • Homework Assignments | 25% |
| • Midterm Exam | 25% |
| • Final Exam | 45% |

There will be homework due before almost every class session.

Your class participation grade is an assessment of your attendance, the quality and quantity of your in-class participation, and your performance on in-class exercises to the extent that the execution of the exercises occurred during class. I will continue to follow [Harvard's COVID excused absence policy](#), and we expect a fully in-person environment this Fall. Absences from class will be excused in cases including late enrollment in the course, illness or injury, competition for Harvard teams, religious observance, and bereavement. Everyone gets one unpenalized absence from class. Please inform us as soon as possible in the event of conflicts with other Harvard academic commitments, for example examinations in other courses that are scheduled at EC 1745 class time.

To calculate the course letter grade, the performance in each dimension listed above will be converted to a normalized score (a "Z-score"), calculated as the difference between the student's performance on that element and the class mean, divided by the standard deviation. For example, performance by a student that is one standard deviation above the mean would get a Z-score of 1. Performance equal to the mean of the class would get a Z-score of 0. If the mean midterm score is 50 out of 100, and the standard deviation is 10, then a raw score of 55 would convert to a Z-score of $0.5 = (55-50)/10$. The Z-scores of each element are then given the weights listed above and added together to create a composite score, which will determine the letter grade. The rationale for using these Z-scores is to give each element of the course an influence on the final

grade that is approximately in line with the weight indicated above. We anticipate a letter grade distribution that is in line with the average of other Harvard economics undergraduate courses.

The final exam will be comprehensive – based on the entire course, including material from before the midterm. The midterm exam will be in-person during a class session and the final exam will be in-person during the final exam period.

Both the final exam and the midterm will require students to bring a functioning laptop computer to class. Students will do calculations for these exams in Excel spreadsheets and upload their exam spreadsheets as their submissions for the exams.

Academic Honesty. Students in this class are bound by the Harvard College Honor Code.

Special Accommodation. Students needing academic accommodations because of documented disabilities must present their Faculty Letter from the Accessible Education Office (AEO) and speak with the professor by the end of the second week of the term.

Communication:

Please include EC1745 in the subject line of all e-mails regarding the course. If you have any questions or concerns about course policies, please send an email to any of the course staff or to me.

COURSE OUTLINE

Day 1: 9/4	Chapter 1 / Introduction to Financial Management
	Chapter 2 / Financial Statements and Cash Flow (part 1)
Day 2: 9/11	Chapter 2 / Financial Statements and Cash Flow (part 2)
	Chapter 3 / Working with Financial Statements (part 1)
Day 3: 9/18	Chapter 3 / Working with Financial Statements (part 2)
	Chapter 4 / Time Value of Money
Day 4: 9/25	Chapter 5 / Discounted Cash Flow Valuation
Day 5: 10/2	Chapter 6 / Interest Rates and Bond Valuation
Day 6: 10/9	Chapter 7 / Equity Markets and Stock Valuation
Day 7: 10/16	MIDTERM EXAM AT BEGINNING OF CLASS
	Chapter 8 / Net Present Value and Other Investment Criteria

Day 8: 10/23	Chapter 9 / Making Capital Investment Decisions
Day 9: 10/30	Chapter 10 / Some Lessons from Capital Market History
Day 10: 11/6	Chapter 11 / Risk and Return
Day 11: 11/13	Chapter 12 / Cost of Capital
	Chapter 13 / Leverage and Capital Structure (part 1)
Day 12: 11/20	Chapter 13 / Leverage and Capital Structure (part 2)
Day 13: 12/4	Chapter 14/ Dividends and Dividend Policy
	Chapter 15/ Raising Capital
EXAM PERIOD	FINAL EXAM

Note: Schedule is preliminary and subject to change.